(30,298)

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1924

No. 371

NORTHERN PACIFIC RAILWAY COMPANY, GREAT NORTHERN RAILWAY COMPANY, CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY, PLAINTIFFS IN ERROR,

vs.

THE DEPARTMENT OF PUBLIC WORKS OF WASHINGTON, E. V. KUYKENDALL, DIRECTOR OF PUBLIC WORKS; HANCE H. CLELAND, SUPERVISOR OF PUBLIC UTILITIES, ET AL.

IN ERROR TO THE SUPREME COURT OF THE STATE OF WASHINGTON

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[fol. a] **IN SUPREME COURT OF WASHINGTON**

DEPARTMENT OF PUBLIC WORKS, Deft. in Error,

vs.

NORTHERN PACIFIC RAILWAY COMPANY et al., Pltffs. in Error

CLERK'S CERTIFICATE

I, C. S. Reinhart, Clerk of the Supreme Court of the State of Washington, hereby certify that the above and foregoing, together with the six volumes accompanying the same comprising in all seven volumes, of which the within is vol. 1 pages 1 to 192 are a full, true and correct transcript of the record in the above-entitled cause, and that in pursuance of the writ of error heretofore received I now transmit the same together with the original writ of error and the original citation which is contained in Vol. 1 hereof.

In testimony whereof, I have hereunto set my hand and affixed the Seal of said Court, this 16th day of April, 1924.

C. S. Reinhart, Clerk of the Supreme Court of the State of Washington. (Seal of the Supreme Court, State of Washington.)

[fol. 1] Before the Public Service Commission of Washington

Cause No. 5159

THE PUBLIC SERVICE COMMISSION OF WASHINGTON, Complainant,

vs.

THE NORTHERN PACIFIC RAILWAY COMPANY, THE GREAT NORTHERN Railway Company, the Chicago, Milwaukee and St. Paul Railway Company, the Oregon-Washington Railroad & Navigation Company, Respondents.

The Public Service Commission of Washington, of its own motion, complains of the respondents, and alleges:

I

The above-named respondents, and each of them, are common carriers operating standard gauge railroads within the State of Washington, and subject to the jurisdiction of this Commission, as defined in Chapter 117, Laws 1911.

II

The respondent, the Northern Pacific Railway Company, has on file its tariffs—

No. 398-L WPSC 1172
No. 2637-B WPSC 1242
No. 2813-E WPSC 1202

III

The respondent, the Great Northern Railway Company, has on file its tariffs—

No. 504-A corrected WPSC 534 corrected
No. 1708-B WPSC 895
No. 1610-A WPSC 852
No. 1607-A WPSC 849
No. 1049-H WPSC 882
No. 905-H WPSC 883
No. 684-H WPSC 734
No. 484-F WPSC 729½
No. 546-E WPSC 727½
No. 1242-D WPSC 880
No. 1622-B WPSC 866
No. 1611-A WPSC 853
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No. 871-E WPSC 745
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No. 164-G WPSC 731
No. 527-G WPSC 726
No. 1515-B WPSC 848
No. 1244-B WPSC 859
No. 1518-B WPSC 801

[fol. 2]

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No. 1474-B WPSC 810
No. 1155-D WPSC 816
No. 1514-D WPSC 720
No. 1509-C WPSC 870
No. 1181-F WPSC 884

IV

The respondent, the Chicago, Milwaukee & St. Paul Railway Company, has on file its tariffs—

No. 13825-A WPSC 328
No. 13801-A WPSC 27 (SPA&W)

V

The respondent, the Oregon-Washington Railroad & Navigation Company, has on file its tariffs—

No. 483 WPSC 534

VI

That all of the tariffs referred to in the preceding paragraphs contain rates and charges, rules and regulations for the transportation of logs within the State of Washington, which rates and charges, rules and regulations are excessive, unreasonable, discriminatory and preferential:

VII

That the Commission, in its findings in Cause No. 5092, dated at its office in Olympia, Washington, August 17, 1920, specifically called the attention of the above named carriers to the discriminatory character of the rates and set out in the various tariffs covering the movement charges of logs within the State of Washington, and in said Cause No. 5092 requested that carriers within a reasonable time file new tariffs in lieu of the ones then in effect, and referred to above by number, or previous issues thereof, containing new rates and charges that would be reasonable and non-discriminatory:

[fol. 3]

VIII

That a reasonable time has elapsed, and each and all of said carriers above referred to have failed to file such tariffs.

Therefore, the Commission will, upon a date to be set, enter upon a hearing concerning the matters and things herein set forth, and at the conclusion of said hearing, make such order as the facts found warrant.

Witness, the Public Service Commission of Washington, this 28th day of December, 1920.

The Public Service Commission of Washington, by E. Kuykendall. Chairman. Hance Cleland, Commissioner. Frank R. Spinning, Commissioner.

Attest: —— ——, Secretary.

[fol. 4] Before the Public Service Commission of Washington

No. 5092

In the Matter of the Application of the Northern Pacific Railway Company, Great Northern Railway Company, Chicago, Milwaukee & St. Paul Railway Company, Oregon-Washington Railroad & Navigation Company, Spokane, Portland & Seattle Railway Company, Spokane International Railway Company, Inland Empire Railroad Company, Spokane & Eastern Railway & Power Company, Walla Walla Valley Railway Company, Washington, Idaho & Montana Railway Company, Camas Prairie Railroad Company, Hartford Eastern Railway Company, Pacific Coast Railroad Company, Puget Sound & Cascade Railway Company, Newaukum Valley Railroad Company, Cowlitz, Chehalis & Cascade Railway Company, Washington Western Railway Company, Puget Sound & Baker River Railway Company, Pacific Northwest Traction Company, North Coast Power Company, Port Townsend & Puget Sound Railroad Company, Yakima Valley Transportation Company for Increase in Rates in State of Washington.

REPORT OF COMMISSION

This cause coming on to be heard before the Public Service Commission of Washington, at the Senate Chamber in the Capitol Building in Olympia, Washington, August 17, 1920, at 10.00 o'clock A. M., on the application of the above carriers for permission to increase rates on state traffic to conform to the increase authorized by the Interstate Commerce Commission in Ex Parte 74. The carriers submitted the evidence introduced before the Interstate Commerce Commission at the hearings held in Washington, D. C., between the dates of May 24, 1920, and July 7, 1920, together with decision of the Interstate Commerce Commission in this case and the decision of the United States Railroad Labor Board. The 1920 Transportation Act passed by Congress, effective March 1, 1920, requires the Interstate Commerce Commission to determine the aggregate value of railroad property devoted to transportation. Paragraph 3 of Section 15-A, provides that: "The Commission (Interstate Commerce Commission) shall from time to time determine and make public what percentage of such aggregate property value constitutes a fair return thereon, and such percentage shall be uniform for all rate groups or territories which shall be designated by the Commission.

In making such determination it shall give due consideration, among other things, to the transportation needs of the country and the necessity, under honest, efficient and economic management of existing transportation facilities, of enlarging such facilities in order to provide the people of the United States with adequate transpor-
[fol. 5] tation. Providing that during the two years beginning March 1, 1920, the Commission shall take as such fair return a sum

equal to 5½% of such aggregate value and may in its discretion add thereto a sum not exceeding one-half of one per cent of such aggregate value to make provision in whole or in part for improvements, betterments, etc."

For the purpose set forth in the section above quoted, the Interstate Commerce Commission grouped the carriers into three districts which were designated as Eastern Group, Southern Group and Western Group, the Western Group substantially covering all that portion of the United States lying west of Chicago and west of a line south through Cairo, Illinois, and west of the Mississippi River.

The increases prescribed by the Interstate Commerce Commission in the various rate groups, in order to yield the six per cent return must be applied to state as well as interstate traffic.

The hearings were conducted not only before the Interstate Commerce Commission but before a committee selected pursuant to the terms of the transportaion act by the state commissions to represent them at such joint hearing.

No segregation in the presentation of testimony was made between the state and interstate business. The act contemplates cooperation between the Interstate Commerce Commission and the various state commissions. We find in the opinion of Commissioner McChord of the Interstate Commerce Commission in the case involving this increase the following statement:

"The Commission has attempted to deal with this case under the law in a broad, comprehensive, common sense way, realizing that the primary responsibility for the future of our railroads rested upon its shoulders and that of the state railroad commissions who have throughout the case and are still cooperating in a most helpful way. They will, in my opinion, measure up to this responsibility to make fully effective what the Interstate Commerce Commission has with their cooperation done in this case."

The transportation act also provides that if in any investigation it shall be found that any state rate causes any unjust discrimination aganst interstate commerce, the Interstate Commerce Commission shall prescribe the rate thereafter to be charged in such manner as to remove the discrimination, "the law of any state or the decision or order of any state authority to the contrary notwithstanding."

The Supreme Court of the United States held prior to the enactment of such statute that a state rate creating an unjust discrimination against interstate traffic could not stand.

Whether or not we agree with the wisdom or validity of the above enactment, we do not believe that the present emergency justifies the precipitation of a conflict and litigation between state and federal authorities.

[fol. 6] This Commission, without undertaking to decide whether Congress had exceeded its constitutional powers in enacting the 1920 Transportation Act, recognizes the necessity of the carriers for increased revenue, and believes that less harm will result from permitting the increase of state rates to conform to those authorized

by the Interstate Commerce Commission on interstate traffic, than would result in a blocking of the general program outlined by Congress by the delay necessary for an investigation of specific rates and traffic conditions.

The Commission also recognizes that a general breakdown in transportation exists throughout the United States, and does not undertake to place responsibility therefor. That carriers have shown their revenues to be insufficient to properly maintain their properties and that confidence is lacking on the part of investors with regard to securities offered by the carriers for betterments and improvements.

That the failure to function efficiently is a matter of much concern to the commercial interests of the country and that immediate relief must be granted in order to protect the commercial life of the nation.

The Western rate group as originally defined and in relation to which evidence was submitted on the part of the carriers, included the territory above described, but that this Commission and western Commissions generally contended before the Interstate Commerce Commission that the said Western Territory included the Middle Western States where rates were relatively lower than those in the Mountain and Pacific States where a higher percentage of increase could be justified, and urged upon the Interstate Commerce Commission that the existing high rates in the Mountain and Pacific states and the more prosperous conditions of carriers in those states, should be given consideration and the rates equalized by permitting a lower percentage of general increase in the Mountain and Pacific States.

This contention was recognized by the Interstate Commerce Commission by the creation of a new rate group known as the "Mountain-Pacific Group." The Mountain-Pacific Group is that part of the country lying west of a line between the state of North Dakota and the state of Montana and the boundary line between the states of South Dakota and Wyoming and Nebraska and Wyoming to the line of the Union Pacific extending east from Cheyenne, Wyoming, then following the line of the Union Pacific westward to Cheyenne, running southward through Denver, Colorado Springs, Pueblo and Trinidad; then following the line of the Atchison, Topeka & Santa Fe Railway through Raton and Las Vegas, New Mexico to Albuquerque; then south along the line of the Atchison, Topeka & Stanta Fe to El Paso, Texas.

In the original application to the Interstate Commerce Commission the carriers proposed general percentage increases in freight rates alone in respective groups as follows:

Eastern thirty per cent; Southern 31 per cent; and Western twenty-four per cent. That under the Wage Board allowance, in addition to the percentages above indicated, the carriers in their application to the Interstate Commerce Commission estimated that such award which was dated July 21, 1920, would equal approximately 11.2 per cent of the total railway revenues of the Western

carriers as finally adjusted by them for the constructive year showr for the purpose of demonstrating the requirements of the carriers. This percentage added to the 24 per cent originally asked for, would entitle the carriers to an increase of 35.2 per cent in Western Group. However, in the final order of the Interstate Commerce Commission the total percentage increase, including that made necessary by the award of the Wage Board, was fixed at 25 per cent in the new Mountain-Pacific group of freight revenue.

[fol. 7] As indicated above, in the original application the carriers proposed to obtain certain desired additional revenue by general percentage increases applicable to freight traffic only; no increases were suggested upon passenger, express or mail traffic, and in the carriers' amended proposal following the award of the Labor Board, they proposed to make increases upon all classes of traffic.

The Interstate Commerce Commission upon the submission of this further evidence of the carriers permitted increases to be made by all steam railroads serving the territory in the groups hereinbefore designated. The order permits a general increase in passenger fares of 20 per cent. in all groups, including the same percentage of increases on excess baggage, a surcharge of 50 per cent. upon passengers in sleeping and parlor cars and an increase of 20 per cent. in the milk and cream rates where carried in passenger trains and not included in the freight revenue.

That the order of the Interstate Commerce Commission in this case permitted the carriers to file the increases authorized upon five days' notice becoming effective August 26, 1920; that between the date of the issuance of the order of the Interstate Commerce Commission and August 26th there was insufficient time for the carriers to file increases on state business giving the regular thirty days' notice. That on August 9th, 1920, this Commission by Order No. 3305, permitted the carriers to file increases conforming to those ordered by the Interstate Commerce Commission, effective on less than statutory notice, that is to say, upon the same date as those authorized by the Interstate Commerce Commission, August 26, 1920, and subject to the power of the Commission to suspend any or all rates included in such tariff.

At this hearing the representatives of the shippers of various commodities, particularly lumber, logs, grain and grain products appeared before the Commission and urged special consideration of their particular interests, but on the whole this Commission concurs in the views expressed by the Interstate Commerce Commission that a fair disposition will be attained by applying the general increase with the distinct understanding that this action is without prejudice to any future findings or order of this Commission.

With particular reference to the objections urged upon the part of the logging industry, it is our opinion that the present rates are illogically constructed and not in harmony in different communities, and that unless carriers immediately proceed to arrange a modification of such rates, the Commission will upon its own motion, require a readjustment of same, but for the reasons above stated, will

permit the percentage increase authorized by the Interstate Commerce Commission to apply upon the log rates in this state.

With respect to the increases authorized by the Interstate Commerce Commission on passenger rates and passenger revenue, this Commision will authorize the 20 per cent. increase upon such passenger rates, charges and fares, with the exception that no increase will be allowed where the present passenger fare is in excess of 3.6 cents per mile, and provided further, that this Commission will not permit increases to be made upon milk and cream carried upon passenger trains where the earnings therefrom are a part of the passenger revenue.

[fol. 8] We are further convinced from the showing made before this Commission that the existing differential in rates between pulp logs and saw logs is unjustified and for this reason the proposed increase as to pulp logs is suspended for a period of ninety days for further investigation.

This Commission while granting the percentage increase for the reasons stated herein, is of the opinion that increase in revenue desired by the carriers should ordinarily be made upon some other basis than that of percentage. While any increase in rates will produce a percentage of the former rate, the fixing of increases by percentage works injustice to communities and commodities and as a general rule should not be applied where increase in revenue is desired, and this Commission will in the future, as in the past, oppose advances in freight rates by the Interstate Commerce Commission or by carriers, by the percentage method. We consent to this method in this instance solely upon the ground of the existing emergency and the lack of time for the application of a more scientific basis.

This case differs materially from the ordinary application of public utilities for increases in rates. It is based upon the Act of Congress known as the 1920 Transportation Act which was passed for the purpose of meeting a crisis in the transportation of the country. The Interstate Commerce Commission and state commissions, however, are still charged with the responsibility of seeing that rates now as formerly must be just and reasonable, but if the 1920 Transportation Act is to be treated as being within constitutional limits and a valid exercise of power on the part of Congress, there is little left to be determined by the various state commissions. The Act provides that a fair return is a sum equal to 5½ per cent. of the aggregate value of the railroad properties, and authorizes the Interstate Commerce Commission to add an additional one-half of one per cent. to make provision for betterments, equipment and so forth. It is obvious that to pursue any other method than that used by the Interstate Commerce Commision, such as attempting to increase the rates upon individual lines in proportion to their necessities, would have the effect of placing the strong lines in a still stronger position and the weak lines in the hands of receivers. It might be that an investigation of the separate lines operating in the state would disclose that some are now earning more than the 6 per cent. return prescribed by the Interstate Commerce Commission, and that the weaker roads are earning less than such return. To reduce the rates

on the stronger lines and increase those of their weaker competitors, would turn the tide of traffic to the strong lines having lower rates and bankrupt the less prosperous roads.

It is for this reason that the 1920 Transportation Act provides that if any carrier receives for any year a net income in excess of 6 per cent., one-half of such excess shall be placed in a reserve fund maintained by such carrier, and the remaining half shall be turned over to the Interstate Commerce Commission for the purpose of establishing and maintaining a general railroad contingent fund.

[fol. 9] It is evident that an investigation as to the percentage of increase allowed to meet the requirements of the Act must relate to rate groups rather than to separate states, or individual lines, or even specific commodities. For each state to undertake a specific investigation as to the tariffs of the railroads within its boundaries and prescribe rates upon that basis, would result in nullifying the Act of Congress, the order of the Interstate Commerce Commission and the creation of violent discrimination between state and interstate rates, and be detrimental to the interests of the public.

In accepting the verdict of the Interstate Commerce Commission in this emergency and in observing the mandates of the 1920 Transportation Act this Commission does not waive its right at any future time to test the validity or constitutionality of any provision of that Act which may in its judgment seem an encroachment of Federal power over state functions. We adopt this course this time because we believe that it will most effectively meet the transportation crisis that confronts us and hasten the rehabilitation of the transportation systems of the country.

We shall expect the carriers as rapidly as possible to make such modifications of their tariffs as will remove the objectionable features which must inevitably result from any percentage increase.

The lack of equipment to move the freight of the country, has for several years been a source of aggravation and financial loss to shippers and carriers and a matter of much annoyance and concern to regulatory bodies. The carriers have ascribed this unfortunate condition more to their own poverty than to increases in volume of traffic. Congress and the Interstate Commerce Commission have sought to relieve them of financial embarrassment, and this Commission in common with the Commissions of other states, is seeking to cooperate with the national authorities, to that end.

We realize that cars and locomotives cannot be built in a day, but the shippers and the regulatory bodies, will in the future expect more efficient service, and a reasonably rapid improvement and increase in facilities and equipment.

An order will be entered suspending the proposed increases for the period of ninety days from August 25, 1920, as to milk and cream carried on passenger trains, and as to passenger fares on lines now charging 3.6 cents or more per mile, and as to pulp logs.

The authorization for said general increase is not and shall not be construed as a finding by the Commission that such increase is reasonable, or non-discriminatory, and in event that any rate so in-

[fol. 10] creased is hereafter attacked on any ground, the burden of

proof shall be upon the carrier affected to justify the rate challenged, in the same manner as if such carrier were making application for the increase.

Witness, The Public Service Commission of Washington this 25th day of August, 1920.

The Public Service Commission of Washington, by E. V. Kuykendall, Chairman. —— ——, Commissioner. Frank R. Spinning, Commissioner.

Attest: J. H. Brown, Secretary.

[fol. 11] BEFORE THE PUBLIC SERVICE COMMISSION OF WASHINGTON

[Title omitted]

ANSWER OF GREAT NORTHERN RAILWAY COMPANY

The respondent, the Great Northern Railway Company, answers the complaint as follows:

I

It admits Paragraphs 1 to 5 inclusive.

II

Answering Paragraph 6 it admits that the tariffs mentioned in the complaint contain rates, rules, regulations and charges for the transportation of logs within the State of Washington. Denies that said rates or any of them are excessive; denies that it has any knowledge or information sufficient to form a belief as to whether or not the rates, charges, rules and regulations of any of the respondent carriers, other than of this respondent, are unreasonable, discriminatory or preferential, but specifically denies that any rate, rule, charge or regulation of this respondent for the transportation of logs within the State of Washington is excessive, unreasonable, discriminatory or preferential.

III

Answering Paragraph VII the respondent admits that the Public Service Commission in its findings of fact in Cause No. 5092, stated [fol. 12] that in its opinion the present log rates are illogically constructed and not in harmony in different communities, and further stated that unless the carriers immediately proceeded to arrange a modification of such rates, the Commission would require readjustment of same, upon its own motion, and denies all allegations contained in said Paragraph 7, not herein specifically admitted.

IV

It denies paragraph 8.

V

Further answering said complaint this respondent alleges that the reduction of any of its rates and charges for the transportation of saw logs in the State of Washington, either directly or by means of the modification of any of its rules and regulations affecting such rates, will make the same unremunerative, unjust, unfair and unreasonable, and will operate as a confiscation of its property and deprive it of its property without due process of law, contrary to the federal and state constitutions.

Respondent further alleges that the log rates of this respondent in the State of Washington were placed upon their present basis by said respondent, pursuant to the order of the Interstate Commerce Commission of the United States, in the cause known as Ex Parte 74, wherein said Commission found that in order to return a fair return to their property devoted to the transportation service, the carriers in the territory including the State of Washington, were entitled and required to have a 25% increase in their pre-existing freight rates, which 25% increase brought said log rates up to their present level; that the Public Service Commission of Washington by its order in Cause No. 5092, recognized and found that the increases so prescribed by the Interstate Commerce Commission in the various [fol. 13] rate routes must be applied to state as well as interstate traffic, in order to yield the fair return found necessary by said Interstate Commerce Commission, and to which said carriers are entitled under the Act of Congress known as the Interstate Commerce Act; and that any reduction by order of the Public Service Commission of this state of the log rates of this respondent in the State of Washington, will cause and create and illegal preference and discrimination, in favor of the intrastate commerce performed by this respondent in the transportation of saw logs within the State of Washington, and against the interstate commerce performed by this respondent and other carriers between said state and other states, and generally in the territory to which said general 25% increase of freight rates was made applicable by said order of the Interstate Commerce Commission.

Wherefore, this respondent prays that the complaint be dismissed.
Thomas Balmer, E. C. Maithias, Attorneys for Respondent Great Northern Railway Company.

[fol. 14] BEFORE THE PUBLIC SERVICE COMMISSION OF WASHINGTON

[Title omitted]

ANSWER OF O.-W. R. & N. CO.

Comes now the defendant, Oregon-Washington Railroad & Navigation Company, and for answer to plaintiff's complaint herein, admits, denies and alleges as follows, to wit:

I

Admits the allegations contained in Paragraph I of the complaint.

II

Answering Paragraphs II, III and IV of the complaint, this defendant alleges that the applicable tariffs on file with the Public Service Commission of the State of Washington are the best evidence of the contents of tariffs filed by respondents, Northern Pacific Railway Company, Great Northern Railway Company and Chicago, Milwaukee & St. Paul Railway Company. This defendant therefore prays reference to said tariffs for the purpose of showing contents thereof.

III

Admits the allegations contained in Paragraph V of the complaint.

[fol. 15] IV

Answering Paragraph VI of the complaint, this defendant admits that Oregon-Washington Railroad & Navigation Company's Tariff 483 WPSC No. 534 contains rates, charges, rules and regulations for the transportation of logs within the State of Washington, but denies that such rates, charges, rules or regulations, or any or either of them, are excessive, unreasonable, discriminatory or preferential, but alleges the fact to be that said rates, charges, rules and regulations are fair, just and reasonable.

V

Answering Paragraph VII of the complaint this defendant prays reference to the Washington Public Service Commission's records in Cause No. 5092, as showing what is therein contained.

VI

Denies each and every allegation contained in Paragraph VIII of the complaint, and the whole thereof.

Rates Named Herein Apply Only On Intrastate Traffic.

NORTH PACIFIC COAST FREIGHT BUREAU

LOCAL FREIGHT TARIFF No. 29

C. M. & St. P. Ry. Co. G. F. D. No. 14220-A
G. N. Ry. Co. G. F. O. No. 1613-A
N. P. Ry. Co. Tariff No. 398-M
O.-W. R. & N. Co. Tariff No. 560
S. I. Ry. Co. Tariff No H-371

NAMING

COMMODITY AND DISTANCE RATES

ON

SAW LOGS, CARLOADS

(As Described in Item 30, Page 3)

BETWEEN

STATIONS ON LINES OF

Chicago, Milwaukee & St. Paul Ry. Co.
Great Northern Ry. Co.
Northern Pacific Ry. Co.
Oregon-Washington R. R. & Nav. Co.
Spokane International Ry. Co.

IN

WASHINGTON.

ISSUED NOVEMBER 16, 1921

EFFECTIVE DECEMBER 17, 1921

Issued by
S. J. HENRY, Agent,
Seattle, Wash.

(Authy. 73)

I. C. P.—1500

LIST OF TARIFFS CANCELLED IN FULL OR IN PART BY THIS TARIFF.

ISSUED BY	Tariff No.	W. D. P. W. No.	Cancelled by this Tariff
C. M. & St. P. Ry.	13825-A	328	
G. N. Ry.	164-G	731	All Washington Intrastate Rates except on Hardwood Logs
	484-F	729½	
	527-G	726	
	546-E	727½	
	594-A Corrected	534 Corrected	
	684-H	734	
	871-E	745	
	905-H	883	
	968-F	881	
	1049-H	882	
	1155-D	816	
	1181-F	884	
	1242-D	880	
	1244-B	859	
	1474-B	810	
	1509-C	870	
	1514-E	727	
	1515-B	848	
	1516-B	803	
	1518-B	801	
	1524-C	868	
	1540-C	869	
	1607-A	849	
	1609-A	851	
	1610-A	852	
	1622-B	866	
	1708-B	895	
	1787-A	929	
	1790-A	931	
	1855-A	935	
N. P. Ry.	398-L	1172	
	2637-C	1334	
	2813-E	1202	
O.-W. R. & N. Co.	483	534	
S. I. Ry.	L-86	145	
S. P. A. & W. R. R.	13801-A	27	

PARTICIPATING CARRIERS.

NAME OF CARRIER	ABBREVIATIONS	Powers of Attorney Issued to S. J. Henry as Agent and Attorney. FX1 No. (Filed with Interstate Commerce Commission)
Chicago, Milwaukee & St. Paul Railway Company	C. M. & St. P. Ry.	56
Great Northern Railway Company	G. N. Ry.	41
Northern Pacific Railway Company	N. P. Ry.	44
Oregon-Washington Railroad & Navigation Company	O.-W. R. & N. Co.	14
Spokane International Railway Company	S. I. Ry.	21

17a

Item No. 5. **Intermediate Application.**

Rates named herein will apply from or to directly intermediate points.

Item No. 10. **Computing Distance Rates.**

In computing Distance rates shown herein, distances provided in publication specified below, supplements thereto and reissues thereof, will govern:

When rates for exact distances are not shown, use rates for next greater distance for which rates are shown.

Chicago, Milwaukee & St. Paul Ry.	C. M. & St. P. Ry. Table of Distances, G. F. D. No. 11850-A, W. P. S. C. No. 96 also G. F. D. No. 12650-D, W. D. P. W. No. 412.
Great Northern Ry.	G. N. Ry. G. F. O. No. 400-A, W. P. S. C. No. 476
Northern Pacific Ry.	N. P. Ry. Official Table of Distances No. 1500-D, W. P. S. C. No. 1094.
Oregon-Washington R. R. & Navigation Co.	O.-W. R. &. N. Co. Table of Distances, Circular No. 56-A, W. P. S. C. No. 411.
Spokane International Ry.	S. I. Ry. Tariff L-84, W. P. S. C. No. 141.

Item No.	SUBJECT	RULES AND REGULATIONS
25	**Charge for cars equipped with patent bunks**	(a) **Will not apply on N. P. Ry.** When special log cars equipped with patent bunks by carriers are available and are furnished for the transportation of logs under this tariff, a charge of fifty (50) cents per loaded car per trip will be made, which charge is in addition to the rates named herein. (b) **Applies only on N. P. Ry.** Cars equipped with patent bunks when available will be subject to a charge of 50c per car per trip in addition to the rates named in this tariff, except when shippers or consignees have executed contract with carriers to pay the cost of equipping cars with patent bunks the amounts due thereunder will be collected in accordance with instructions given by the Accounting Department until amount stipulated in said contract has been paid in full.
30	**Definition of Saw Logs**	The term Saw Logs as used in this tariff applies only to Cedar, Cottonwood, Fir, Hemlock, Larch, Pine, Poplar or Spruce Logs manufactured at saw mills into Lumber or Shingles.
35	**Loading and Unloading**	Shipper shall furnish all necessary chains, stakes and fastenings and will load and unload logs at his own cost and expense, all loading and chaining to be done by the shipper in a manner satisfactory to the carrier or its agent. If any car shall in the opinion of the carrier or its agent be improperly loaded the carrier may refuse to accept same for transportation.
40	**Minimum Load**	The minimum load is 7,000 feet board measure for each car used, except on shipments moving between stations on the S. I. Ry. the minimum load is 8,000 feet board measure for each car used.
45	**Recovery of Logs Lost in Transit**	Logs lost in transit will be recovered at the expense of the owner except in the case of wreck or other accident chargeable to the carrier.
50	**Scaling**	Except where Logs are scaled by carrier, the shipper shall at his own expense make careful scale of the Logs and shall furnish to the railway agent a certificate showing the actual number of feet of logs on each car. The railway shall have the right to check-scale logs and revise the shipper's scale if found inaccurate.
55	**Terminal and Transit Services, Demurrage etc.**	Shipments transported under this tariff are entitled to such privileges and subject to such charges as are published in lawful tariffs of individual lines providing for Allowances, Arbitraries, Car Mileage, Demurrage, Diversion, Lighterage, Reconsignments, Rental of Special Equipment, Storage, Switching, Transfer, Wharfage and other Transit and Terminal Services.

175

SECTION 1.

Item No.	COMMODITY	APPLICATION		Rates in cents per 1000 feet	Route via
100	**Saw Logs**, as described in Item 30 page 3, carloads, minimum load as per Item 40 page 3.	FROM Forcamp ..... Wash.	TO Nagrom ..... Wash. Norco ..... "	(A)200 (A)340	N. P. Ry.
105		FROM Auburn ..... Wash.	TO Eagle Gorge ..... Wash.	(A)200	
110		FROM Nagrom ..... Wash.	TO Selleck ..... Wash. Eagle Gorge ..... " Tacoma ..... " Seattle ..... "	(A)280 (A)225 (A)340 (A)350	
115		TO Eagle Gorge ..... Wash.	FROM Buckley ..... Wash. Covington ..... " Crocker ..... "	(A)270 (A)270 (A)290	
120		FROM Kerriston ..... Wash.	TO Norco ..... Wash.	(A)340	
125		FROM Baldi ..... Wash.	TO Tacoma ..... Wash.	(A)330	
130		FROM Easton ..... Wash.	TO Cle Elum ..... Wash.	(A)250	
135		TO Ellensburg ..... Wash.	FROM Thorp ..... Wash. Casway ..... " Younger ..... " Easton ..... "	(A)225 (A)270 (A)280 (A)310	
140		TO Yakima ..... Wash.	FROM Younger ..... Wash. Easton ..... " Hubener ..... "	(R)350 (R)380 (R)390	

(A)Advance.
(R)Reduction.

17 C

SECTION 2.

DISTANCE RATES.

Distance rates on Saw Logs as described in Item 30, carloads, minimum load as per Item 40, page 3.

Except as provided in Notes referred to below distance rates shown below will apply between stations on the following lines respectively, as indicated.

APPLYING BETWEEN STATIONS ON	AND STATIONS ON
(a). **C. M. & St. P. Ry.** stations west of and including Ellensburg, Wash., except as provided in Notes 1, 2 and 3 below.	**C. M. & St. P. Ry.** stations west of and including Ellensburg, Wash.
(b). **C. M. & St. P. Ry.** stations, Spokane, Wash., to Spokane Bridge, Wash., inclusive	**C. M. & St. P. Ry.** stations, Spokane, Wash., to Spokane Bridge, Wash., inclusive
(c). **C. M. & St. P. Ry.** stations north of and including Tweedie, Wash.	**C. M. & St. P. Ry.** stations north of and including Tweedie, Wash.
(d). **G. N. Ry.** stations in Washington except as provided in Notes 4 and 5 below.	**G. N. Ry.** stations in Washington.
(e). **N. P. Ry.** stations in Washington except as provided in Notes 6 and 7 below.	**N. P. Ry.** stations in Washington.
(f). **O.-W. R. & N. Co.** rail stations in Washington except as provided in Notes 7 and 8 below.	**O.-W. R. & N. Co.** rail stations in Washington.
(g). **S. I. Ry.** stations in Washington.	**S. I. Ry.** stations in Washington.

Distances (See Item 10, page 3)	Rates in cents per 1000 feet	Distances (See Item 10, page 3)	Rates in cents per 1000 feet.
5 miles or less	200	Over 60, not over 65 miles	360
Over 5, not over 10 miles	225	" 65, " " 70 "	370
" 10, " " 15 "	250	" 70, " " 75 "	380
" 15, " " 20 "	270	" 75, " " 80 "	390
" 20, " " 25 "	280	" 80, " " 85 "	400
" 25, " " 30 "	290	" 85, " " 90 "	410
Over 30, not over 35 miles	300	Over 90, not over 100 miles	420
" 35, " " 40 "	310	" 100, " " 110 "	430
" 40, " " 45 "	320	" 110, " " 120 "	440
" 45, " " 50 "	330	" 120, " " 130 "	450
" 50, " " 55 "	340	" 130, " " 140 "	460
" 55, " " 60 "	350	" 140, " " 150 "	470

Explanation of Notes.

Note 1.—Will not apply between points involving C. M. & St. P. Ry., Car Ferry or Barge Service.

Note 2.—Logs will not be transported over the Chicago, Milwaukee and St. Paul Railway Company Lines operated by electric power, except where special arrangements have been made with operating department of the carrier for such handling and then only upon condition that such chains and fastenings will be furnished by shipper as may be necessary, in the opinion of carrier, to properly and safely transport the shipment.

Note 3.—Rates to or from East Marginal Way (extending from Duwamish Ave., on East Marginal Way to end of track), Seattle, Wash., will be $5.00 per car higher than rates to or from Seattle, Wash., on traffic originating at or destined to stations south of Seattle, Wash., to and including Hughes Siding, Wash., also stations east of Black River Jct., Wash., to and including Noble, Wash.

Note 4.—Rates will not apply from, to or between stations located on the line extending Index Wash., to Wenatchee Wash., not inclusive.

Note 5.—Will not apply on shipments involving service over double track, through snow sheds or through tunnels, except where special arrangements are made with the Railway Company.

Note 6.—Will not apply between points located East of Palmer Junction, Wash., and West of Spokane, Wash.

Note 7.—Will not apply on shipments that involve handling through Ostrander tunnel located between Ostrander and Kelso, Wash., or over Lewis River Draw-Bridge located between Woodland and Ridgefield, Wash.

Note 8.—Will not apply to or from O.-W. R. & N. Co. stations Megler to Nahcotta, Wash., both inclusive.

A Advance
R Reduction.

17d

Wherefore, having fully answered plaintiff's complaint, defendant prays that this action be dismissed.

Dated at Portland, Oregon, this 11th day of January, 1921.

H. A. Scandrett, 1416 Dodge Street, Omaha, Nebraska. A. C. Spencer, 510 Wells Fargo Bldg., Portland, Oregon. W. A. Robbins, 510 Wells Fargo Bldg., Portland, Oregon.

[fol. 16] BEFORE THE PUBLIC SERVICE COMMISSION OF WASHINGTON

[Title omitted]

ANSWER OF CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY

The Chicago, Milwaukee & St. Paul Railway Company, answering unto the complaint herein,

I

Admits the allegations contained in paragraphs I, IV and VII of said complaint.

II

As to the matters and things set forth in paragraphs II, III and V of said complaint, this defendant denies that it has any information sufficient to form a belief.

III

It admits that the tariffs of this defendant referred to in paragraph IV of said complaint contain rates, charges, rules and regulations for the transportation of logs within the State of Washington; but it denies that said rates and charges, rules and regulations, or any thereof, are excessive, or discriminatory, or preferential, or unreasonable, save and except that it admits and alleges that the rates and charges therein prescrived are in many respects unreasonably low.

Chicago, Milwaukee & St. Paul Railway Company, by F. M. Dudley, General Attorney.

(Here follows Exhibit to Answer marked side folio pages 17, 17a, 17b, 17c, 17d.)

[fols. 18–21] BEFORE THE DEPARTMENT OF PUBLIC WORKS OF WASHINGTON

No. 5159, No. 5330

[Title omitted]

ORDER OF SUSPENSION AND CONSOLIDATION

The North Pacific Coast Freight Bureau, by S. J. Henry, its agent, filed with this Department on November 18, 1921, its local freight tariff No. 29, W. D. P. W. No. 65, issued November 16, 1921, effective December 17, 1921, naming rates on saw logs in carload lots, being a commodity tariff and a distance tariff applying between all stations in the state of Washington on the lines of the Chicago, Milwaukee and Saint Paul Railway, Great Northern Railway, Northern Pacific Railway, Oregon-Washington Railroad and Navigation Company and Spokane International Railway Company in Washington.

The Department of Public Works of Washington has pending before it and undetermined its Cause No. 5159, involving the reasonableness of all of the carload rates on sawlogs now in effect on the lines of the above named carriers and the lines of other common carriers in the state of Washington. This proceeding (Cause No. 5159) was instituted by the Department for the purpose of finding and establishing uniform log rates throughout the state of Washington. Hearings have been held in Cause No. 5159, at which hear- [fol. 22] ings all of the respondent carriers, parties to said Tariff No. 29, were parties and introduced evidence and otherwise took part in said proceeding. During the course of the hearings in Cause No. 5159, it was suggested by members of the Department that the carriers parties thereto present a proposed joint tariff which might be by the department considered in connection with the determination of the question therein involved, namely, uniform carload log rates. No such tariff was filed in that proceeding but near the conclusion of the final hearing in that Cause No. 5159 it was stipulated by and between the logging interests parties thereto and the carriers parties thereto that the carriers should prepare and file with the Department a tariff carrying proposed uniform log rates, which said tariff was to be filed without prejudice to the contention of the carriers in Cause No. 5159 as to the compensatory nature of the log rates. It was also stipulated by and between the same parties that no hearing need be or should be had to determine the reasonableness or sufficiency of the rates to be covered in the proposed tariff (Tariff No. 29) and that all of the evidence and exhibits in Cause No. 5159 should be considered all of the evidence which might be introduced in a hearing on said Tariff No. 29 and that the final order fixing uniform log rates by this Department in Cause No. 5159 should be the final order as to Tariff No. 29 and that for all purposes the two proceedings might be considered as one and consolidated.

Said Tariff No. 29 has been filed in compliance with that stipulation and agreement.

The rates named in said Tariff No. 29 are increases over existing rates and it appears to the Department that the rights and interests [fols. 23–33] of the public of the state of W shington may be detrimentally affected thereby.

Order

It is therefore ordered That North Pacific Coast Freight Bureau Local Freight Tariff No. 29, W. D. P. W. No. 65, be and the same is hereby suspended for a period of ninety (90) days from December 17, 1921, inclusive.

It is further ordered That for the purpose of this and subsequent orders and for all other purposes Causes Nos. 5159 and 5330 be and the same are hereby consolidated and will hereafter be treated as one and that all of the evidence, exhibits and briefs offered and received or filed by all parties in Cause No. 5159 will be considered as having been offered and received or filed in Cause No. 5330.

It is further ordered That the rates now in effect on sawlogs carloads applying on intrastate traffic be maintained and remain in full force and effect until further order of the Department.

The Department expressly reserves all rights and jurisdiction to enter its order in Cause No. 5159 with the same force and effect as though the Tariff No. 29 under suspension herein had not been filed.

Witness The Department of Public Works of Washington this twenty-sixth day of November, 1921.

Department of Public Works of Washington, by E. V. Kuykendall, Director. Hance H. Cleland, Supervisor of Public Utilities. —— ——, Supervisor of Transportation.

Attest: J. H. Brown, Secretary. (Seal Department of Public Works.)

[fol. 33½] BEFORE THE DEPARTMENT OF PUBLIC WORKS OF WASHINGTON

No. 5159 and No. 5330, Consolidated

[Title omitted]

FINDINGS OF FACT AND ORDER

This matter came on regularly for hearing, pursuant to notice duly given, in the Senate Chamber at Olympia, Washington, on April 11th to 13th, 1921; then being continued at Olympia, on June 27th to 28th, inclusive, and further continued at Olympia, October 24th to 29th, inclusive, before E. V. Kuykendall, Director, and Supervisors Hance H. Cleland and Frank R. Spinning; the Depart-

ment being represented by O. O. Calderhead, Traffic Expert; R. W. Clifford, Assistant Attorney General; A. E. Freeman and H. O. Berger, Assistant Traffic Experts; E. J. Delbridge and H. S. Taylor reporting the proceedings.

The parties were represented as follows:

Chicago, Milwaukee & St. Paul Railway Company:
By James L. Brown, Asst. Supt. of Trans., Seattle, Wash.
By F. C. Dow, Supt., Tacoma, Wash.
By F. M. Dudley, Attorney, Seattle, Wash.
By H. B. Earling, Vice-President, Seattle, Wash.
By Jas. S. Eccles, Trainmaster, Tacoma, Wash.
By E. A. Lalk, D. F. & P. A., Tacoma, Wash.
By A. W. Faragher, Chief Clerk of Vice-Pres., Seattle.
By Samuel Greengard, Traveling Accountant, Seattle.
By O. P. Kellogg, Asst. to Asst. Trf. Mgr., Seattle.
By M. Nicholson, General Mgr., Seattle, Wash.
By Chas. E. Ingalls, Accountant, Seattle, Wash.

[fol. 33½a] Great Northern Railway Company:
By Thomas Balmer, Attorney, Seattle, Wash.
By C. N. Bolander, Chief Clerk, Seattle, Wash.
By H. McCaustland, Car Foreman, Everett, Wash.
By C. McDonough, Supt. Cascade Div., Everett, Wash.
By Henry H. May, Chief Clerk Acct. Dept., St. Paul.

Northern Pacific Railway Company:
By W. C. Albee, Supt., Tacoma, Wash.
By L. R. Capron, Asst, G. F. A., Seattle, Wash.
By F. A. Cleveland, Special Clerk, Seattle, Wash.
By E. V. Peterson, Asst. Statistician, St. Paul.
By Jas. Bruce, Master Mechanic, Tacoma, Wash.
By L. B. da Ponte, its attorney.

Oregon-Washington Railroad & Navigation Company:
By J. C. M. Dodds, Aud'r of Disbursements, Portland, Ore.
By W. H. Guild, Asst. Supt., Portland, Oregon.
By J. W. Mount, Asst. G. F. A., Portland, Ore.
By W. A. Robbins, Attorney, Portland, Oregon.

Cowlitz Chehalis & Cascade Railway Company:
By W. E. Brown, Vice-President and General Manager.
By O. L. Brown, President, Chehalis, Wash.

Spokane International Railway Company:
By Geo. B. King, A. G. F. & P. A., Spokane, Wash.

Newaukum Valley Railroad Company:
By F. C. Frew, G. F. A., Onalaska, Wash.

Puget Sound & Cascade Railway Company:
By Thomas Smith, its attorney, Mount Vernon, Wash.

Skookum Railway & Logging Company:
By F. H. MacLaffeith, Gen. Mgr., Tenino, Wash.
By A. F. Cook, Tenino, Wash.

Sultan Railway & Timber Company:
By Joseph Irving, Pres. and Mgr., Everett, Wash.

Sunset Timber Company, Lewis Mills & Timber Company, Raymond Lumber Company, Warren Logging Company, Trap Creek Logging Company, Globe Lumber Company, and Willapa Harbor Traffic Association:
By Welsh & Welsh, Attorneys.
By E. C. Richmond, Secy. Willapa Harbor Traffic Assn.

Associated Log Shippers:
By Henry L. Gray, Engineer, Seattle, Wash.
By Lyle, Henderson & Carnahan, Attorneys, Tacoma, Wash.

Eastern Railway & Lumber Company:
By S. A. Agnew, Manager, Centralia, Wash.
By Reid F. Hubbard, Secy., Centralia, Wash.

Cascade Lumber Company:
By A. H. Huebner, General Manager, Yakima, Wash.
By A. E. Slaughter, President, Yakima, Wash.

[fol. 33½b] Mason County Logging Co., Independence Logging Co. and Vance Lumber Company:
By W. H. Abel, Attorney, Montesano, Wash.
By J. A. Vance, Vance Lumber Co.
By H. Synnestvedt, Pres. and Mgr., Independence Logging Co.
By J. T. Krumm, Vice-Pres. and Supt.
By C. R. Bordeaux, Asst. Mgr. Mason County Logging Co.
By Thomas Bordeaux, President, Mason County Logging Co.
By Wilford Bordeaux, Mason County Logging Co.

Skagit Logging & Boom Company:
By L. Houghton, President, Seattle, Wash.
By Ed. R. Hogg, Secretary, Seattle, Wash.

Buffelin Lumber Mfg. Company:
By H. E. Rogers, Auditor, Tacoma, Wash.

Willamette Valley Lumbermen's Association:
By F. G. Donaldson, Traffic Mgr., Portland, Oregon.

Mineral Lake Logging Company, Cascade Timber Company and Pacific States Lumber Company:
By E. M. Hayden, Attorney, Tacoma, Wash.
By J. S. Dickson, Manager, Tacoma, Wash.

Lake Riley Lumber Company:
By Petrus Pearson, President, Seattle, Wash.

Loggers' Information Association and Chinn Timber Company:
By R. B. Chinn, Vice-President and Manager.

Great Northern Lumber Company:
By B. K. Brouwer, Chief Clerk, Leavenworth, Wash.

Western Pine Manufacturers' Association:
By R. J. Knott, Traffic Manager, Portland, Oregon.

The McNeill-O'Hearne Company, Sedro Logging Company and Nestos Timber Company:
By Stephen V. Carey, Attorney.

Puget Sound Saw Mills & Shingle Company:
By Farrell, Kane & Stratton, and Stephen V. Carey, Attorneys, Seattle, Wash.

North Pacific Coast Freight Bureau:
By S. J. Henry, Seattle, Wash.

Cherry Valley Logging Company:
By T. M. Williams, Everett, Wash.

Saginaw Timber Company:
By A. J. Morley, President, Aberdeen, Wash.

Hobi Logging Company:
By A. J. Morley, Secretary, Aberdeen, Wash.

Union Lumber Company;
By Judd Greenman, Logger, Union Mills, Wash.

[fol. 33½c] C. K. Spaulding Logging Company:
By R. H. Mills, Secretary, Portland, Oregon.

Clear Lake Lumber Company:
By B. R. Lewis, Clear Lake, Wash.

Clarke County Timber Company:
By H. C. Clair, Treasurer, Portland, Oregon.

McCoy Loggie Timber Company:
By P. McCoy, President, Bellingham, Wash.

Deer Park Lumber Company:
By W. M. Leuthold, President, Deer Park, Wash.

West Fork Logging Company:
By L. T. Murray, President, Tacoma, Wash.

West Coast Lumbermen's Association:
By H. N. Proebstel, Traffic Manager, Seattle, Wash.

Balch Logging Company:
By H. P. Brown, Manager, Aberdeen, Wash.

Puget Sound Lumber Company:
By James Buchanan, President, Tacoma, Wash.

Wallace Falls Timber Company:
By J. E. Frost, Vice-Pres. and Gen. Mgr., Gold Bar, Wash.

Sound Timber Company:
By J. L. Bridge, Manager, Seattle, Wash.

Pacific Car & Foundry Company:
By F. W. Chriswall, Chief Engineer, Seattle, Wash.
By E. T. Fehnel, Asst. Sales Mgr., Seattle, Wash.

The Public Service Commission of Oregon:
By Hal. F. Wiggins, Traffic Expert, Salem, Oregon.

Witnesses were sworn and examined, documentary evidence was introduced, and after a consideration of all the facts, the Department makes and enters its findings of fact and order hereinafter set forth.

History

This cause involves the rates, rules, regulations and charges applicable to the intrastate movement of logs within the State of Washington, and is brought about by complaint on its own behalf by the Public Service Commission of Washington, now the Department of Public Works of Washington and hereinafter referred to as the Department.

Briefly reviewed the present log rates now under consideration originated through the establishment by the Northern Pacific Railway Company of log rates for the use of tidewater lumber mills to whom had been sold large tracts of standing timber acquired by [fol. 33½d] the Northern Pacific Railway Company in the Government land grant. The contract under which the timber was purchased provided that a heavy percentage of the manufactured product of logs should be moved over the line of the Northern Pacific Railway to transcontinental points, and a rate was named for the transportation of the logs from the point of logging operations to the lumber mill which was in the nature of a milling in transit rate. All subsequent log rates have been more or less governed by the established log rates published by the carriers in the early days for the purpose of securing the establishment of lumber mills at advantageous localities from an operating standpoint. The tariffs of the carriers, both past and present, confirm this belief in their definition of saw logs prescribed in their tariffs as follows:

"The term 'saw log' as used in this tariff, applies only to cedar, cottonwood, fir, hemlock, larch, pine, poplar or spruce logs manufactured at saw mills into lumber or shingles."

In no other tariffs except those providing for milling in transit privileges is an analagous definition of any commodity carried.

Findings of Fact

I

The records submitted in this case indicate that as a whole more manufactured lumber is being handled by the carriers than the carriers are transporting in the form of logs. It is true that some of this is accounted for by the fact that certain mills manufacture lumber without any corresponding log haul, but a great deal of it is due to the fact that logs are transported by water and manufactured into lumber which goes forward by rail.

II

The rates on logs as covered by this cause were originally those named by the carriers themselves, and with a few exceptions the Public Service Commission of Washington has not considered any of the log rates named by the carriers in any case before it. There has never been a case involving all of the rates applicable to the movement of logs within the state before this Department. It is worthy of note that practically all log rates were voluntarily established and maintained for long periods by the carriers themselves without application to any regulatory body for any increase, prior to Federal control. While the carriers were under the control of the United States Railroad Administration, all rates for the transportation of freight were increased 25 per cent. effective June 25, 1918, under General Order No. 28 of the United States Railroad Administration, and on August 26, 1920, these rates were again increased 25 per cent by order of the Interstate Commerce Commission in Ex Parte 74 and of the Public Service Commission of Washington in Cause No. 5092.

[fol. 33½e] III

In cause No. 5092 involving the general increase in rates applicable to all railroads within the state parties to this case, the Public Service Commission called attention of said carriers to the discriminatory rates applicable on the intrastate movement of logs within the state, and directed the carriers to readjust said rates upon a proper basis. Pending this readjustment the Department permitted the 25 per cent. increase to apply on logs as well as other intrastate freight for the sake of uniformity to meet the critical emergency then existing, and to carry out the purpose and intent of the 1920 transportation act and the order of the Interstate Com-

merce Commission. Our order permitting said increase contained the following:

"The authorization of said general increase is not and shall not be construed as a finding by the Commission that such increase is reasonable, or non-discriminatory, and in the event that any rate so increased is hereafter attacked on any ground, the burden of proof shall be upon the carrier affected to justify the rate challenged, in the same manner as if such carrier were making application for the increase."

On December 28, 1920, no action having been taken by the carriers to readjust said rates, the Public Service Commission filed its complaint, charging that said rates, rules, regulations and charges were unreasonable, unjust, discriminatory, prejudicial and preferential, and ordered that hearings be held to determine what rates should be prescribed for the intrastate movement of logs within the state.

During the course of the hearings in cause No.. 5159 it was suggested by members of the Department that the carriers parties thereto, present a proposed joint tariff which might be by the Department considered in connection with the determination of the questions therein involved namely, uniform carload log rates. No such tariff was filed in that proceeding, but near the conclusion of the final hearing it was stipulated by and between the logging interests, parties thereto, and the carriers, parties thereto, that the carriers should prepare and file with the Department a tariff carrying proposed uniform log rates.

It was also stipulated by and between the same parties that no hearing need be, or should be, had to determine the reasonableness or sufficiency of the rates to be covered in the proposed tariff, and that all of the evidence and exhibits in cause No. 5159 should be considered all of the evidence which might be introduced in a hearing on said tariff, and that the final order fixing uniform log rates by this Department in cause No. 5159 should be the final order as to said tariff, and that for all purposes the two proceedings might be considered as one and consolidated. Through the North Pacific Coast Freight Bureau, by S. J. Henry, its agent, said tariff was filed, being given its local freight tariff No. 29, W. D. P. W. No. 65, issued November 16, 1921, received November 18, 1921, effective December [fol. 33½f] 17, 1921, and was filed in compliance with that stipulation and agreement. The Department therefore in cause No. 5330 issued an order of suspension, suspending said tariff for a period of 90 days from December 17, 1921, and ordered that for all subsequent orders and for all other purposes, causes Nos. 5159 and 5330 be consolidated and treated as one, and that all of the evidence, exhibits and briefs offered and received, or filed by all parties in cause No. 5159 be considered as having been offered and received or filed in cause No. 5330, and that the rates then in effect at the time of the date of said order, November 26, 1921, on sawlogs in carloads, applying on intrastate traffic, be maintained and remain in full force and

effect until further order of the Department. The Department by this order expressly reserved all right and jurisdiction to enter its order in cause No. 5159 with the same force and effect as though the said tariff No. 29 then under suspension had not been filed.

A hearing was held on December 20th, 1921, for the purpose of permitting parties not previously interested in cause No. 5159 to enter evidence and exhibits, and at that hearing it was stipulated by the parties entering appearance in same, that the evidence, exhibits and briefs of all parties in cause No. 5159 should be considered as their own.

IV

The rates for the transportation of logs within the State of Washington now charged by the four principal carriers within the state, as well as the rates for the transportation of logs charged by such carriers prior to August 26, 1920, are and were those shown by Department's Exhibit A.

V

It appears from the evidence in this case that the tariffs and schedules containing the rates shown in Department's Exhibit A are and were lacking in uniformity, and are and were grossly discriminatory, unduly preferential and therefore unlawful.

VI

The log traffic within the State of Washington is for the most part confined to a limited area, or the district west of the Cascade Mountains. In the case of the carriers operating in this area, the log transportation characteristics are substantially the same. It was conceded by all parties to this case that a uniform distance tariff covering the haul of logs within the State of Washington was desirable. The tariff proposed by the carriers, is a uniform distance tariff, applicable to all lines alike. It is the purpose of this order to establish a uniform distance scale.

VII

All operating cost exhibits introduced covered the year 1920, during which year the peak prices for labor and material were reached. [fol. 33½g] Since 1920, there has been a marked decline in labor and material costs. As near as can be determined, the unit cost of railroad operation at the present time is approximately 20 per cent less than the unit costs of a year ago.

VIII

A considerable portion of the railway operating cost during 1920 was due to an abnormal empty car movement, occasioned by the efforts of the carriers to accomplish the return of their cars to their home lines after the relinquishment of unified Federal operation.

IX

The operating revenues assigned to the State of Washington are made up of revenues from intrastate traffic, plus a part of the revenue from interstate traffic assigned to the State of Washington upon a straight mileage basis. However, the operating expense assigned to the State of Washington embraces all of the expense incurred within the state and includes all of the assembling and terminal expense on interstate freight. During the year 1920 the unit freight operating cost charged to the State of Washington by the four principal carriers was approximately 35 per cent. in excess of the combined system average unit freight operating cost. According to the reports of these carriers, their combined systems earned a net profit in freight operation during the year 1920 of $12,943,697, whereas freight operations in the State of Washington are reported to have resulted in a loss of $6,934,966.

X

The unit freight operating cost within the State of Washington would be no greater than the system unit freight operating cost if the assembling and terminal expense in connection with interstate shipments is apportioned over the entire length of haul. Whatever increased cost may result from the haul over the Cascade Mountains is offset by the favorable climatic conditions within the State of Washington, as compared with the rigorous winters in the neighboring states of Montana, the Dakotas and Minnesota, which hamper the movement of freight, with a corresponding increase in unit operating cost, and the Cascade Mountains are certainly no more formidable than the Rocky Mountains. If the unit freight operating cost incurred by the four principal carriers within the State of Washington is no greater than the system unit freight operating cost, then the freight traffic within the state during the year 1920, instead of producing a loss of $6,934,966, actually yielded a profit of $6,694,432. Whatever the correct rule for the allocation of terminal and assembling expense in relation to interstate traffic may be, it is not properly chargeable to the log traffic of this state.

[fol. 33½h] XI

Even if the unit freight operating cost within the State of Washington should be excessive on account of the haul across the Cascade Mountains, it should be noted that logs are not so hauled. The log traffic is one in which empty cars are hauled up grade, the loads being hauled down grade. Logs generally are delivered in lots of from ten to thirty cars, and rarely ever in lots of less than five cars, thus constituting a very desirable form of traffic. Due to the short haul of logs and the facilities for rapidly loading and unloading, the carriers are able to keep their logging equipment more profitably employed than the equipment used in the handling of other commodities. Log cars are under load a greater portion of the time

than are other classes of equipment having the same average length of haul, while the tonnage of the logs per car is greater than in the case of the average commodity handled. There is considerable reason for the conclusion that the cost of log transportation is less than the average unit cost of freight transportation within the state. The log traffic is to a very large extent confined to the district west of the Cascade Mountains where the greater portion of such traffic originates and is handled on branch lines. The log traffic makes little use of the extensive terminals within the state, the shippers in many instances providing their own terminal facilities. The rolling stock used in the handling of logs consists altogether of flat cars which are less costly than other types of equipment.

XII

Various exhibits were introduced by the associated log shippers and by the carriers to show the financial results from log transportation within the state during the year 1920, the most important of these exhibits being Associated Log Shippers Revised Exhibit No. 4, and the Great Northern Railway Company's Exhibit No. 24. These exhibits were decidedly conflicting. Without attempting to pass upon the comparative merits of these exhibits, we find that Great Northern Exhibit No. 24 contains certain errors and improper assumptions, to-wit:

(a) In establishing the relation between the 1920 taxes and gross earnings, system non-operating revenues to the amount of $12,291,544 were omitted, the result being an unwarranted increase in the amount of taxes assigned to the log traffic.

(b) In listing the system taxes paid, income taxes to the amount of $3,508,928 were included, of which $643,101 were charged to the State of Washington.

(c) Owing to the fact that the log traffic is for the most part handled upon comparatively inexpensive branch lines; and to the fact that it makes practically no use of the costly terminals; and to the further fact that the rolling stock used in the handling of same has a comparatively low cost, it seems unfair to assess against the log traffic its exact prorata of taxes based on gross earnings. An assess-[fol.33½i] ment of approximately 50 per cent of its prorata of taxes on such basis should be sufficient.

(d) The conclusions reached in Great Northern Exhibit No. 24 are to a certain extent based upon figures supplied by the carriers and shown in Associated Log Shippers' Exhibit No. 3, which figures were challenged by the Associated Log Shippers as being of doubtful correctness, and upon which point the carriers produced no additional evidence or information.

(e) Said Great Northern Exhibit No. 24 shows that during the year 1920 the log traffic within the state was handled by the four principal carriers at a loss of $110,629, while their intrastate traffic

within the state earned a net profit of $3,284,579. Therefore, if carried to its logical conclusion, this exhibit shows that during the same year the interstate traffic handled within the state, must have incurred a loss of $17,241,385. This conclusion seems absurd when considered in the light of the testimony of the carriers that long haul traffic is more profitable than short haul traffic.

(f) The exhibit shows that during the year 1920 the four principal carriers within the state incurred a loss from log traffic of $110,629. According to our computation such log traffic during the year in question yielded a profit over the cost of operation, taxes and depreciation accounts, of at least $818,448.

XIII

In arriving at the net revenue from log traffic earned by the four principal carriers within the state during 1920, of $818,448, the following method was used:

Gross revenue from log transportation	$2,859,172	
Incidental freight revenue assigned to log transportation	56,232	
Total revenue		$2,915,404
Operating expense assigned to log transportation	$1,923,198	
Taxes assigned to log transportation	173,758	
Total expense		2,096,956
Total net		$818,448

In arriving at the operating expense assigned to the log traffic, the cost of freight operation within the State of Washington was calculated upon the basis of the cost per 1,000 gross ton miles of handling all freight upon the combined systems of the four principal carriers, and in this manner the total cost of freight operation assignable to the state of Washington was found to be $38,678,870, which is equivalent to a unit operating cost of $5,321 per 1,000 revenue gross ton miles handled by the four principal carriers within the state during the year in question. On this basis the cost of handling the log traffic within the state during the year by such carriers was $1,923,198. The taxes assigned to the log traffic are one-half of those contended for by the carriers after the elimination [fol. 33½jj] of income taxes. All of the figures used in this calculation are contained in the annual reports filed with us by the carriers, or were taken from the exhibits supplied by the carriers in this case.

XIV

The present main track mileage of the four principal carriers within the State of Washington is 4,936 miles. The actual value of

all the property owned within the state by such carriers, as shown by Great Northern Exhibit No. 25 (same being the minutes of the 1921 proceedings of the State Equalization Committee), is $294,360,243, of which $255,672,247 represents real property, while $38,687,996 represents rolling stock. The cost of the aforementioned property is unknown, valuation now in progress by the Interstate Commerce Commission being incomplete, but the Washington Railroad Commission found that the actual cost of 3,007 miles of main track within the state was approximately $50,000 per mile, which cost included terminals, rolling stock and all operating property of every kind. Upon the basis of a cost of $50,000 per mile, the property fo the four principal carriers within the state would have a total cost of $246,800,000.

XV

For the purpose of estimating the approximate rate of return earned by the four principal carriers within the state from the log traffic during the year 1920, we will assume the value of the property of such carriers within the state which is in any way used or useful in connection with the log traffic, is $300,000,000, a greater sum perhaps than the evidence will justify. Following the method of division as indicated by the carriers' exhibits, it is considered that not more than 75 per cent of such value, or $225,000,000 is assignable to the freight business with the state. During the year 1920 the gross ton miles of logs, hauled by the four principal carriers within the state, constituted 4.97 per cent of the total gross ton miles of revenue freight hauled within the state by such carriers. It is therefore considered that five per cent of that part of the value of the carriers' property assigned to freight service should represent the ttntative rate base for use in determining the rate of return earned by the log traffic in 1920; this tentative rate base being $11,250,000.

XVI

Using the tentative rate base of $11,250,000 and the net revenue over operation, taxes and depreciation accounts, or $818,448, it is seen that during the year 1920 which was a period of excessively high operating cost, the log traffic within the state earned a net rate of return of 7.28 per cent which is in excess of the 6 per cent rate of return prescribed by the Interstate Commerce Commission under the Transportation Act of 1920 as a fair rate of return on the aggregate value of the property of the railroads as a whole, and a rate which the carriers have treated in this case as not fair.

[fol. 33½k] XVII

There is no commodity movement in the United States which is similar or analogous to the movement of logs in the Pacific Northwest. The log traffic in this state is large in volume and it is practically a continuous movement in trainload lots throughout the year.

The lumber industry which utilizes logs as raw material, supplies the carriers with approximately 65 per cent of the outgoing traffic from this state. Due to the peculiar local conditions which surround the log traffic within this state, comparisons of log transportation rates in other states and decisions of tribunals involving log rates in such states are of little aid to us in this case. Neither is the log traffic fairly comparable with that of any other commodity transported within the State of Washington.

XVIII

That a fair, reasonable and uniform tariff to cover the transportation of logs within the State of Washington upon the lines of all carriers parties to this proceeding, is that shown in the order attached hereto. This tariff in our judgment will provide adequate compensation to the carriers and the rates specified therein are no greater than shippers should be called upon to pay. The rates which are now, and which have been, in effect were and are unduly discriminatory, preferential and lacking in uniformity. The revenue from such a schedule is no criterion as to the revenue which might result from a uniform and nondiscriminatory tariff. The rates prescribed herein, are just, fair, reasonable and sufficient.

XIX

In order to test the workings of this tariff, it is provided that the same shall remain in effect during an experimental period of twelve months from the date it becomes effective, and if at the end of such experimental period the tariff contained in the attached order is found to be oppressive to the carriers or to the log shippers, a rehearing may be had before this Department upon the matters involved in this order.

XX

The impossibility of accurately determining the cost of transporting any given commodity by a rail carrier is conceded by many traffic and statistical experts. A comparison of the widely different conclusions reached by experts of acknowledged ability and integrity who have presented exhibits in this case, demonstrates the difficulties of such a task. We realize that the calculations we have made and the conclusions we have reached differ from those of the experts on both sides of this controversy. We and our own experts, however, have had the benefit of all the exhibits and testimony in the case, and have sought to avoid errors pointed out during the progress of the hearing. While the difficulty of ascertaining with certainty the cost of transporting any given commodity in a past [fol. 33½1] operation is great, the difficulty of forecasting the cost is infinitely greater. Predictions can only be based upon past experiences and future probabilities in the light of all the facts. The volume of traffic moving is a controlling element. The fixed charges

of a railroad remain fairly constant, and the operating expenses do not increase proportionately with increased traffic volume.

If the rates we prescribe stimulate the log movement or the volume of traffic increases for any other reason, these rates will increase the earnings of the carriers on this commodity.

It is because of the impossibility of forecasting results with certainty that we have decided to prescribe a twelve months period of experimental operation under the new tariff.

The rates we have fixed will constitute a material reduction to the shippers, and in view of less expensive operation, and the reasonable assumption of increased volume of traffic, we believe they will yield a net revenue equal to that afforded by the existing rates, and in any event equal to the rate of return fixed by the Interstate Commerce Commission as fair and just on the traffic as a whole.

XXI

The Department finds that Northern Pacific Coast Freight Bureau local freight tariff No. 29, W. D. P. W. No. 65, referred to in finding III is unjust, unreasonable and more than sufficient and more than the traffic will bear, and will order that this tariff be cancelled and superseded by another tariff which shall carry the rates and provisions named in the order attached hereto.

XXII

The Department will prescribe in its order rates for the intrastate movement of logs within the State of Washington on a single car basis without prescribing a different train load rate. The rates to be named in the order are based upon both the single car and the trainload movement, and the Department has taken into consideration the fact that the movement is peculiarly in trainload lots of ten or more cars because of the methods of logging operations.

XXIII

In view of the fact that log flats, equipped with steel log bunks constitute safe, adequate and sufficient equipment for the prompt, safe and expenditious transportation of logs, we strongly recommend that the carriers, parties hereto, equip a reasonable number of log flats with steel bunks, the number so equipped bearing a proper relation to the volume of log traffic on the respective systems. The testimony shows that cars so equipped will permit of heavier loading, and hence yield a greater revenue to the carriers. The minimum load for cars not equipped with steel bunks should be 500 feet less than the minimum prescribed for cars so equipped and we will so order. The Department will direct that a rule be carried in the [fol. 33½m] tariffs of the carriers whereby a lower charge will be made on cars not equipped with steel log bunks.

XXIV

The present method of specifying the minimum load per car is inequitable and results in the assessment of excess freight charges against the shipper who upon an average loads more than the minimum per car. A more equitable method would be to designate an average carload minimum based on the number of cars tendered the carrier in any one shipment, and the Department will so order.

XXV

The promulgation of the rules designating an average carload minimum based upon the number of cars tendered the carrier in any one shipment will reduce the revenues of the carriers by an amount equal to the excess charges amounting to about six per cent of the total charges or approximately $150,000 per year, under the scale of rates herein prescribed. We have taken this into consideration and have fixed the basic rate sufficiently high to earn that additional revenue, that is to say, we have prescribed a rate that will produce six per cent more revenue than we would have prescribed had we not changed the rule as to minimum load.

XXVI

The Department further finds that the practice of the carriers of assessing charges upon a log scale is not uniform and will expect the carriers to confer with the loggers for the purpose of determining the proper method of scaling logs and prescribe uniform rules in relation thereto. If agreement cannot be reached the Department will take the necessary steps to establish a fair and uniform rule.

XXVII

The testimony disclosed that the carriers, parties hereto, had heretofore entered into certain contracts naming log rates, and we will direct that the carriers, parties hereto, terminate any and all such contracts insofar as they may name rates, rules, regulations or charges, differing from those herein prescribed.

Order

Wherefore it is ordered by the Department of Public Works of Washington that North Pacific Coast Freight Bureau local freight tariff No. 29, W. D. P. W. No. 65, now under suspension, be, and the same is hereby cancelled

It is further ordered, that the following named carriers, to-wit: Northern Pacific Railway Company, Great Northern Railway Company; Chicago, Milwaukee & St. Paul Railway Company, and the Oregon-Washington Railroad & Navigation Company, parties hereto, [fol. 33½n] and the said S. J. Henry, Agent, North Pacific Coast Freight Bureau, make, publish and file with this Department, effec-

tive on or before twenty (20) days from the date of service of this order, the following distance scale of rates for the intrastate transportation of soft wood logs to-wit: cedar, cottonwood, fir, hemlock, larch, pine, poplar and spruce logs in carloads within the State of Washington in lieu of all distance and commodity rates for the intrastate transportation of such logs in carloads within the State of Washington, the same to remain in effect during an experimental period of twelve months from the effective date thereof, or until the further order of this Department, and make, publish and file all tariffs, cancellations and changes necessary to conform to this order within the time aforesaid.

Scale of Rates

Distances	Rates in cents per 1,000 feet
5 miles or less	115
Over 5, not over 10 miles	125
Over 10, not over 15 miles	135
Over 15, not over 20 miles	145
Over 20, not over 25 miles	155
Over 25, not over 30 miles	165
Over 30, not over 35 miles	175
Over 35, not over 40 miles	185
Over 40, not over 45 miles	195
Over 45, not over 50 miles	205
Over 50, not over 55 miles	215
Over 55, not over 60 miles	225
Over 60, not over 65 miles	235
Over 65, not over 70 miles	245
Over 70, not over 75 miles	255
Over 75, not over 80 miles	265
Over 80, not over 85 miles	275
Over 85, not over 90 miles	285
Over 90, not over 95 miles	295
Over 95, not over 100 miles	305
Over 100, not over 105 miles	315
Over 105, not over 110 miles	320
Over 110, not over 115 miles	330
Over 115, not over 120 miles	340
Over 120, not over 125 miles	350
Over 125, not over 130 miles	360
Over 130, not over 135 miles	370
Over 135, not over 140 miles	380
Over 140, not over 145 miles	390
Over 145, not over 150 miles	395

It is further ordered that the carriers, parties hereto, shall carry a rule in their tariffs applicable to the intrastate movement of logs in carloads within the State of Washington reading substantially as follows:

"Where cars not equipped with steel log bunks are furnished shippers, the charge applicable to each carload will be upon the basis of [fol. 33½o] the rates named in this tariff, less a deduction of fifty (50c) cents per car."

It is further ordered that the carriers provide in their tariffs a minimum load of seven thousand (7,000 ft.) feet per each car equipped with steel log bunks and sixty-five hundred (6,500 ft.) feet per each car not so equipped, to be applied in all cases of single car shipments, but where more than one car is tendered or forwarded in any one shipment, that the minimum load of seven thousand (7,000 ft.) feet be averaged for the entire number of cars equipped with steel log bunks in any one shipment, and a minimum of sixty-five hundred (6,500 ft.) feet shall be averaged for the entire number of cars not so equipped in any one shipment. This rule to apply in all cases except where existing tariffs provide a minima of less than seven thousand (7,000 ft.) feet because of peculiar type of car furnished, in which cases the existing minima shall be maintained. If any controversy arises in relation to the minima to be applied under this exception, the Department will take the necessary steps to determine the same.

It is further ordered that the carriers, parties hereto, terminate any and all contracts naming log rates insofar as they may differ from the rates, rules, regulations or charges prescribed herein.

Witness the Department of Public Works of Washington, this 1st day of February, 1922.

Department of Public Works of Washington, by E. V. Kuykendall, Director. Hance H. Cleland, Supervisor of Public Utilities. Frank R. Spinning, Supervisor of Transportation.

Attest: J. H. Brown, Secretary.

[fol. 34] IN SUPERIOR COURT OF THURSTON COUNTY

NORTHERN PACIFIC RAILWAY COMPANY, GREAT NORTHERN RAILWAY COMPANY, CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY, OREGON-WASHINGTON RAILROAD & NAVIGATION COMPANY, NORTH PACIFIC COAST FREIGHT BUREAU, and S. J. HENRY, as Agent of said North Pacific Coast Freight Bureau, Petitioners and Relators,

vs.

THE DEPARTMENT OF PUBLIC WORKS OF WASHINGTON, E. V. Kuykendall, Director of Public Works; Hance H. Cleland, Supervisor of Public Utilities, and Frank R. Spinning, Supervisor of Transportation, Members of said Department of Public Works, Respondents.

PETITION FOR WRIT OF REVIEW AND ORDER OF SUPERSEDEAS—Filed Feb. 16, 1922

The joint and several petition of the relators, Northern Pacific Railway Company, Great Northern Railway Company, Chicago, Milwaukee & St. Paul Railway Company, Oregon-Washington Railroad & Navigation Company, North Pacific Coast Freight Bureau and S. J. Henry, as Agent of said North Pacific Coast Freight Bureau, respectfully shows to the Court the following facts:

I

The petitioner, Northern Pacific Railway Company, is a corporation organized under the laws of Wisconsin; the Great Northern Railway Company is a corporation organized under the laws of the [fol. 35] State of Minnesota; the Chicago, Milwaukee & St. Paul Railway Company is a corporation organized under the laws of the State of Wisconsin, and the Oregon-Washington Railroad & Navigation Company is a corporation organized under the laws of the State of Oregon. The North Pacific Coast Freight Bureau is an organization maintained by the above named petitioners for the publication of tariffs and other matters of joint interest, and S. J. Henry is its agent.

II

That the four railway companies, relators above named, are, and were during all the times herein mentioned, authorized to do and were doing a general railway business as common carriers by rail, of persons and property for hire, in the State of Washington and other states, and are now, and during all of said times were duly licensed to transact their business as common carriers in the State of Washington, and have to that end duly paid their annual license fees last due said state, and their license fees for all previous years.

III

That heretofore, on or about December 28, 1920, there was filed in the office of the Public Service Commission of Washington, the

predecessor of the respondent, Department of Public Works of Washington, a complaint in writing, in an action entitled "The Public Service Commission of Washington, Complainant, vs. Northern Pacific Railway Company, Great Northern Railway Company, Chicago, Milwaukee & St. Paul Railway Company and Oregon-Washington Railroad & Navigation Company Respondents", No. 5159, alleging that the tariffs of the four railway companies, relators above named, then on file with said Public Service Commission, containing rates, charges, rules and regulations for the transportation of logs within the State of Washington, were excessive, unreasonable, dis-[fol. 36] criminatory and preferential, and that upon a date to be thereafter set, the Commission would enter upon a hearing concerning the matters and things set forth in said complaint, and at the conclusion of said hearing make such order as might be warranted by the facts found.

IV

That on or about the 30th day of December, 1920, said Public Service Commission duly made and served upon said relator railway companies, a citation in said proceeding, notifying and requiring them to answer said complaint, and to file their answer with said Commission within ten days; that thereafter said railway companies severally answered said complaint, specifically denying that any of their rates, charges, rules or regulations for the transportation of logs were unreasonable, excessive, discriminatory or preferential, and affirmatively alleging that the reduction of any of said rates or charges for the transportation of sawlogs, either directly or by means of the modification of any of the rules and regulations affecting such rates, would make the same unremunerative, unjust, unfair and unreasonable, and would operate as a confiscation of their property, and deprive them of their property without due process of law, contrary to the constitutions of the State of Washington and the United States of America.

That in and by said answers said relator railway companies further alleged affirmatively, that their log rates in the State of Washington, then in effect, were made and published pursuant to the order of the Interstate Commerce Commission of the United States, in the cause known as Ex. Parte No. 74, wherein said Interstate Commerce Commission found that in order to yield a fair return on their property de-[fol. 37] voted to the transportation service, the carriers in the territory including the State of Washington were entitled and required to have a twenty-five per cent (25%) increase in their pre-existing freight rates, which twenty-five per cent (25%) increase brought said log rates up to the level at which said rates were published at the time of the commencement of said proceeding; and said relators further affirmatively alleged that the Public Service Commission of Washington by its order in its Cause No. 5092, recognized and found that the increases so prescribed by the Interstate Commerce Commission must be applied to state, as well as interstate traffic in order to yield the fair return found necessary by

said Interstate Commerce Commission, and to which said carriers were entitled under the act of Congress known as the Transportation Act, 1920, and that any reduction by order of the Public Service Commission of the State of Washington of the log rates of said relators in the State of Washington would create and cause an illegal preference and discrimination in favor of the intrastate commerce performed by said relators in the transportation of logs within the State of Washington, and against the interstate commerce performed by said relators and other carriers between said State of Washington and other states, and generally in the territory to which said twenty-five per cent (25%) advance of freight rates was made applicable by said order of the Interstate Commerce Commission.

V

That thereafter hearin-s upon said complaint in said Cause No. 5159 were had before said Public Service Commission and its successor, the Department of Public Works of Washington, at [fol. 38] Olympia, Washington, and evidence was thereupon adduced on behalf of the complainant in said proceeding and on behalf of the relators herein, and said evidence was thereupon submitted to said Department of Public Works for consideration. That during the course of the hearings in said Cause No. 5159 it was stipulated by and between the parties thereto, and all parties appearing therein, that the relators should prepare and file with the Department of Public Works a tariff, naming rates and rules for the transportation of logs in the State of Washington, with the understanding that the filing of said tariff should not be deemed in any manner to prejudice their contention, as supported by the evidence introduced by them at said hearing, as to the scale of log rates which would be required to compensate them for the service, and yield a fair return upon the value of their property devoted thereto; and it was also stipulated by and between the same parties that no hearing need be or should be had to determine the reasonableness or sufficiency of the rates to be published in said proposed tariff, but that all of the evidence and exhibits in said Cause No. 5159 should be considered all of the evidence which might be introduced in a hearing on said proposed tariff, and that the final order of the Department fixing log rates in said Cause No. 5159 should also be the final order as to said log tariff proposed to be filed by the carriers, and that for all purposes the two proceedings might be considered as one and consolidated; that thereafter, and on or about November 18th, 1921, the relator, S. J. Henry as Agent of said North Pacific Coast Freight Bureau and of said four railway companies filed with said Department of [fol. 39] Public Works, the relators' Local Freight Tariff No. 29, W. D. P. W. No. 65, issued November 16, 1921, effective December 17, 1921, naming rates, rules and regulations for the transportation of logs; that the respondents thereupon issued an order in their cause No. 5330, suspending said tariff for a period of Ninety days from December 17, 1921, and ordered that for all subsequent purposes Causes Nos. 5159, and 5330 should be consolidated and treated as

one; that on December 20, 1921, for the purpose of permitting the parties not previously appearing in Cause No. 5159 to enter evidence and exhibits touching said Tariff No. 29, a hearing was held at Olympia before said department of Public Works, and at that hearing it was stipulated by all parties entering an appearance, and was ordered by said Department of Public Works, that the evidence, exhibits and briefs of all parties in Cause No. 5159 should be considered as applicable also to said Cause No. 5330.

VI

That thereafter, and on the 1st day of February 1922, the respondents made and filed their so-called Findings of Fact and Order in said consolidated proceeding, which Findings of Fact and Order were served upon the relators herein February 3, 1922, a true copy of which, marked Exhibit "A," is hereto attached and made a part hereof.

VII

That said proceedings and Causes Nos. 5159 and 5330 before said respondents, and their predecessor, the Public Service Commission of Washington, were instituted in the County of Thurston, [fol. 40] State of Washington, under and pursuant to the provisions of Chapter 117 of the Laws of 1911 and Chapter 145 of the Laws of 1913 of the State of Washington, and the acts amendatory thereof and supplemental thereto. That under and by virtue of the provisions of said laws, the said respondents, and their predecessor, the Public Service Commission of Washington, were directed and required to keep and have a full and complete record of the proceedings had and taken by and before them thereunder, and relators allege that respondents herein have a complete record of the complaint, answers, tariff, findings, orders and evidence in said proceedings Nos. 5159 and 5330.

VIII

Relators further state and allege that said respondents, the Department of Public Works of Washington, and the members thereof claiming to act as said Department of Public Works aforesaid, in making the said Findings of Fact and Order hereinbefore specifically mentioned and set forth, committed manifest error in the following respects:

1. Finding of Fact No. 1 is unreasonable, unlawful, and contrary to the weight of the evidence, which conclusively shows that more than fifty per cent (50%) of the lumber manufactured from logs hauled and delivered by relators is shipped by water and yields relators no revenue whatever.

2. Finding of Fact No. 3 is unreasonable and unlawful, for the reason that there is no evidence in the record in regard to the find-

ing in Cause No. 5092, and in truth and in fact no finding was made in said Cause No. 5092 that the rates applicable to the intrastate movement of logs were discriminatory.

3. Finding of Fact No. 3 is further unreasonable and unlawful and beyond the authority and jurisdiction of the respondents in [fol. 41] adopting from the order in Cause No. 5092, and applying to the present case, the provision of that order whereby the Public Service Commission of Washington assumed and attempted to hold and declare that in the event any rate increased pursuant to said order in Cause No. 5092 should afterwards be attacked, the burden of proof should be upon the carrier affected to justify the rate challenged.

4. Said Department, and its predecessor, the Public Service Commission, erred in holding and deciding in the course of this proceeding, and in finding and concluding in its findings and order herein that the burden of proof was upon the relators to justify the log rates which were in effect at the time of the commencement of said Cause No. 5159. Said ruling and conclusion are unreasonable and unlawful, and beyond the jurisdiction and authority of said respondents and their predecessors, and contrary to the Public Service Commission law of this state and the laws amendatory thereof and supplemental thereto.

5. Said ruling and conclusion are further unreasonable and unlawful and beyond the jurisdiction and authority of said respondents in assuming to place the carriers under the burden of justifying rates which had been found reasonable and necessary by the Interstate Commerce Commission under the Transportation Act of 1920.

6. Said ruling and conclusion and the order based thereon are further unreasonable and unlawful and beyond the jurisdiction and authority of the respondents in that they cause and create an undue and unreasonable advantage, preference and prejudice as between persons and localities in intrastate commerce on the one hand and interstate commerce on the other, and an undue, unreasonable and unjust discrimination against interstate commerce, contrary to the Act of Congress known as the Transportation Act of 1920.

[fol. 42] 7. Finding of Fact No. 5 is unreasonable, unlawful and contrary to the weight of the evidence, which conclusively shows that any lack of uniformity in the rates of the several relators does not cause any discrimination, preference or prejudice, and that said want of uniformity merely appears from the publication of paper rates upon which no traffic moved, and that the rates upon which the traffic actually moved, and which are actually charged the log shippers in this state are just, reasonable and non-discriminatory.

8. Said Department erred in making its Finding of Fact No. 6, for the reason that said finding of fact is unreasonable and unlaw-

ful and not sustained by the evidence adduced at said hearing, but is contrary thereto in the following respects:

(a) It is not true nor does the evidence show, that the log transportation characteristics are substantially the same in the case of all carriers operating in the area west of the Cascade Mountains.

(b) It was not conceded by the relators or any of them that a uniform distance tariff covering the haul of logs within the State of Washington was desirable, unless the rates therein published were sufficiently high to justly compensate each and all of the carriers operating in said territory for their transportation service.

(c) While it is true that the tariff actually filed by the carriers is a uniform distance tariff, applicable to all lines alike, that tariff names rates approximately twice as high as those ordered by the Department and hereinafter mentioned.

(d) There was no concession or admission by either the relators or the loggers that the rates on logs should be the same east of the [fol. 43] Cascade Mountains as those applying west of the Cascade Mountains, and the evidence shows that the transportation and logging conditions in the two regions are entirely different.

9. Finding of Fact No. 7 is unreasonable and unlawful and is not sustained by the evidence adduced at said hearing, but is contrary thereto in the following respects;

(a) It is not true that all operating cost exhibits introduced by the carriers covered the year 1920, but in truth and in fact exhibits and evidence were introduced by said carriers showing operating costs in the years both prior and subsequent to 1920.

(b) It is not true, nor does the evidence show, that since 1920 there has been any marked decline in labor and material costs of railroad maintenance and operation, affecting the cost of transportation.

(c) It is not true, and there is absolutely no evidence to support the finding that the unit cost of railroad operation at the present time is approximately twenty per cent, or any substantial per cent less than the unit cost of the year 1920.

(d) Said finding No. 7 is erroneous and misleading and contrary to the evidence, in that while in the year 1920 the costs of operation and maintenance were high, that year was also a peak year in volume of traffic, and that subsequent thereto, and the evidence shows that during the year 1921 the traffic declined to such an extent that the net results of transportation in the year 1921 were less favorable to the carriers than the year 1920, notwithstanding any falling off in labor or material costs.

10. Finding of Fact No. 8 is unreasonable and unlawful and is not sustained by the evidence adduced at said hearing but is wholly

[fol. 44] imaginary, there being no evidence adduced on said question at the hearing.

11. Finding of Fact No. 9 is unreasonable and unlawful and contrary to the evidence in every respect, save as it quotes actual figures from the annual reports of the carriers.

12. Finding of Fact No. 9 is unreasonable and unlawful, for the reason that the result of the combined system operations of four railroads extending through many states is no basis upon which to predicate a finding of a reasonable rate for any one or all of said railroads, on traffic carried wholly in the State of Washington, and it is wholly irrelevant and immaterial.

13. Finding of Fact No. 10 is unreasonable, unlawful and contrary to the weight of the evidence in the following respects:

(a) The unit freight operating cost within the State of Washington regardless of the manner in which terminal expenses may be charged, is greater than the average unit system freight operating cost, in that in the State of Washington there is a greater proportion of branch line mileage on many of the railroads, if not on all of them, and the average haul within the State of Washington, which has an importanty relation to the unit cost, is much less than on the system on all of the lines, and the density of traffic varies on different portions of the system, and between the system as a whole and the State of Washington, and the geographical, physical, climatic and operating conditions are different in the State of Washington than elsewhere on the systems.

(b) There is no evidence whatever that the increased cost for [fol. 45] the haul over the Cascade Mountains is offset by the favorable climatic conditions within the State of Washington, as compared with the rigorous winters in the neighboring states of Montana, the Dakotas and Minnesota. Said finding is wholly without evidence in its support, nor is there any evidence that the winters in said neighboring states hamper the movement of freight or produce any greater cost of transportation than the many and large floods and other climatic and physical conditions to which the western portion of the State of Washington is subject.

(c) Said finding is irrelevent and immaterial, in that the combined unit freight operating cost of the four carriers on the systems as a whole is no proper criterion or measure for the ascertainment of a rate for the transportation of logs in this state on the lines of any one or all of said four carriers.

(d) It is not true, and the record is absolutely barren of evidence to show that the unit cost of freight operation within the State of Washington would be no greater than the unit system freight operating cost, if the assembling and terminal expense in connection with interstate shipments were apportioned over the entire length of haul.

(e) The finding that terminal and assembling expense is not properly chargeable to the log traffic of this state is absolutely contrary to the evidence, which distinctly shows that the log traffic shares in the use and expense of terminals in this state, and furthermore, a rule of cost analysis which would eliminate an assignment of terminal expense to the log traffic, while yielding to that traffic the benefit of reduced unit operating cost, due to the traffic originated by these terminals, is unreasonable and unlawful.

[fol. 46] 14. Finding of Fact No. 11 is unreasonable and unlawful and is not su-tained by the evidence adduced at said hearing, but is contrary thereto in the following respects:

(a) It is not true, nor is there any evidence to show, that in the log traffic the empty cars are hauled up grade and the loads hauled down grade.

(b) It is not true nor is there any evidence to show, that logs generally are delivered in lots from ten to thirty cars, or that they are rarely delivered in lots of less than five cars, nor that they constitute a desirable form of traffic.

(c) It if not true, and the statement is absolutely contrary to the evidence, that the carriers are able to keep their log equipment more profitably employed than the equipment used in the handling of other commodities.

(d) It is not true, and the statement is absolutely contrary to the evidence, that the log cars are under load a greater portion of the time than are other classes of equipment having the same average length of haul. The undisputed evidence shows that there is no other class of freight which has so short a haul as log traffic.

(e) It is not true, and the statement is absolutely contrary to the evidence, that the tonnage of the logs per car is greater than in the case of the average carload commodity handled, but the evidence, on the contrary, shows that the logs load lighter per car than the average commodity.

(f) It is not true, and the statement is absolutely contrary to the evidence, that the log traffic makes little use of the extensive terminals within the state, but on the contrary, the evidence conclusively shows the log traffic makes an extensive and important use of said terminals.

[fol. 47] (g) While it is true that the rolling stock used in the handling of logs consists altogether of flat cars, which are less costly than some other types of equipment, the Department has deliberately omitted to mention the undisputed fact that the destruction and damage of cars in the logging service is far in excess of the damage to any other class of equipment, and their upkeep is three to four times as expensive.

15. Finding of Fact No. 12 is unreasonable and unlawful and is not sustained by the evidence adduced at said hearing, but is contrary thereto in the following respects;

(a) It is not true that Great Northern Railway Company's Exhibit No. 24 was the most important exhibit introduced at said hearing, but in truth and in fact, said Great Northern Exhibit No. 24 was a rebuttal exhibit, submitted at the request of the Department itself, for the sole purpose of clearly pointing out criticisms and corrections of the Associated Log Shippers' Revised Exhibit No. 4 offered in the rebuttal testimony of the statistician of the Great Northern Railway Company, and was stated on its face to show merely the result of operations of intrastate freight in the State of Washington, based on Mr. Gray's (the Loggers' expert) theory that the average operating cost per thousand gross ton miles of all traffic was the measure of the cost per thousand gross ton miles for log traffic, and it was understood by all parties to the hearing and by the Department that said exhibit was introduced, not as embodying the contentions of the relators as to the cost of handling logs in the State of Washington, but merely to demonstrate that even on the erroneous theory on which the Associated Log Shippers' exhibits were prepared, said exhibits, when subjected to proper corrections, showed that the log traffic was being conducted by the carriers at [fol. 48] present rates at less than the cost of operation. Furthermore, the exhibits submitted in chief by all the relators showed the actual cost of log transportation to be far greater than that shown in said Great Northern rebuttal Exhibit No. 24.

(b) Neither is it true that Associated Log Shippers' Revised Exhibit No. 4 and Great Northern Railway Company's Exhibit No. 24 are decidedly conflicting, the only conflicts being between the mistakes and omissions made by its author and the corrections of those mistakes and omissions made by the statistician of the Great Northern Railway Company in Great Northern Exhibit No. 24.

(c) It is not true, nor is there any evidence to show, that in establishing the relation between 1920 taxes and gross earnings in Great Northern Exhibit No. 24, system non-operating revenues to the amount of $12,291,544 or any amount were omitted, or that the result of such omission, if made, would be an unwarranted increase, or any substantial increase in the amount of taxes assigned to the log traffic.

(d) It is not true, nor does the evidence show, that the inclusion of income taxes paid by the carriers as a part of their system taxes were improperly charged to the State of Washington, and there is no reason why the traffic of the State of Washington, including the log traffic, should not share with other traffic in the payment of said federal income taxes.

(e) It is not true, nor is there any evidence to show, that the branch lines on which most of the log traffic is handled are com-

paratively inexpensive, nor that the log traffic makes practically no use of the costly terminals.

[fol. 49] (f) Exhibit 24 is not erroneous in charging the log traffic with its proportion of taxes in relation to gross receipts, but said Exhibit properly charges taxes, and in this respect is a correction of the Associated Log Shippers' Revised Exhibit No. 4, in which no taxes whatever are shown chargeable to the log traffic.

(g) The statement that Great Northern Exhibit 24 contains errors and improper assumptions, merely because some of the figures were challenged by the Associated Log Shippers as of doubtful correctness, is irrelevant and immaterial, and shows the unlawful basis upon which competent and correct evidence of the relators was discredited by the respondents.

(h) The statement in said finding that said Great Northern Exhibit 24, if carried to its logical conslucion, would show that the interstate traffic handled by the carriers within the State of Washington resulted in a loss of more than seventeen million dollars, and that said conclusion is absurd is merely a recognition of the fact that said exhibit accomplished its purpose in demonstrating the fallacy of the method employed by the Associated Log Shippers of attempting to determine the cost of handling intrastate logs in Washington upon the basis of the unit cost of handling of all traffic in the state, and relators acquiesce in the statement in said finding that said conclusion is absurd when considered in the light of the testimony of the carriers that long haul traffic is more profitable than short haul traffic, but take exception to the fact that said testimony of the carriers is noted in the findings solely for the purpose of criticizing one of the carriers' exhibits, and not for its weight upon the substantial issues in the case.

(i) It is not true, nor is there any evidence to show, that by any [fol. 50] just or proper method of computation, the log traffic during the year 1920 yielded the relators a profit over the cost of operation, taxes and depreciation of $818.448, or any sum.

16. Finding of Fact No. 13 is unreasonable and unlawful and is not sustained by the evidence adduced at said hearing, but is contrary there-o, in the following respects:

(a) There was no evidence adduced at said hearing, nor was the theory advanced by any witness that the cost of freight operation in the State of Washington could be found upon the basis of the cost per one thousand gross ton miles of handling freight upon the combined systems of the four principal carriers, both within and without the State of Washington, but, on the contrary, it was conceded and shown, both by the exhibits of the loggers and of the carriers that the unit cost of freight operation in the State of Washington was at least thirty-five per cent (35%) higher than the average unit cost of freight operation upon their combined systems as a whole.

(b) There was no evidence adduced at said hearing nor can it be concluded from any exhibit introduced at said hearing, or from the annual reports of the carriers, that the total cost of freight operation of the four relator carriers, assignable to the State of Washington for 1920, was $38,678,870 but, on the contrary, it was shown by the exhibits and annual reports of said carriers, and by the exhibits of the loggers themselves, that the actual cost of freight operation in the State of Washington for 1920 was $52,308,268.

(c) There was no evidence that the cost of log transportation west of the Cascade Mountains, on the line of any or all of the relator carriers, was the same per thousand gross ton miles as the average [fol. 51] unit cost per thousand gross ton miles of $5,321, or a total sum for the year 1920 of $1,923,198, found by using the combined average unit cost of the four systems involved in this case, but the undisputed evidence was that the cost of log transportation per thousand gross ton miles in western Washington was far in excess of said sum, and varied over the line of each of the four carriers involved in this proceeding.

(d) Said finding is wholly irrelevant, and does not pretend to show, or have any bearing upon the cost of log transportation in this state on the lines of any one or all of the four carriers.

(e) There is no evidence to show that it is reasonable, fair, or just to assign taxes to the log traffic on the basis of only fifty per cent (50%) of the assignment of taxes to all other traffice in the state, nor is there any just reason why taxes should not be assigned to the log traffic on the same basis as to all other traffic in the state

(f) The method employed by the Department and set forth in said Finding No. 13, of attempting to find the cost of handling logs in Washington by multiplying the gross ton miles of logs by the average unit cost per gross ton mile of freight operation upon the four combined systems, taking no account of the difference between the cost of long and short hauls, or of other factors of expense applicable to the log traffic, but not applicable to other traffic, is the same method which in Great Northern Exhibit 24 is characterized as "absurd."

17. Findings of Fact Nos. 14 and 15 are unreasonable and unlawful and are not sustained by the evidence adduced at said hear- [fol. 52] ing, but are contrary thereto, in the following respects:

(a) The finding of value of the four principal carriers in a lump sum is irrelevant and immaterial, and not proper method of reaching a basis of reasonable rates for any one of all of said carriers.

(b) Said finding of approximately three hundred million dollars for the total value of all of the property of said four carriers, of which two hundred twenty-five million dollars is assignable to the freight transportation, is contrary to the evidence, in that said finding is predicated upon the assessed value of the property of said

carriers for the year 1920 by the State Board of Equalization, but said valuation was made about the year 1908, and is not more than the value of the property at that time, without any increase for additions and betterments, chargeable to Capital Account, which have been added to the property since said date, in the sum of many millions of dollars, namely, more than fifty million dollars added to the property of the four carriers since said date, and on which they are entitled to earn a rea-onable return.

(c) One of the carriers, namely, the Northern Pacific Railway Company, proved the value of its property as found by the Interstate Commerce Commission, pursuant to law, and the proper proportion of the valuation of said railroad was assigned to the log traffic according to the methods prescribed by law, and amounts to more than seventeen million dollars, as shown by the evidence, whereas in said findings there is allowed but $11,250,000 as the value of the property devoted to the log traffic by the four carriers involved in this proceeding.

(d) The said findings of value are utterly unreasonable and arbitrary, and not supported by any evidence, and are not in excess of [fol. 53] one-fifth of the true and fair value of the property of the four carriers involved in this case devoted to the log traffic.

18. The Department erred in its Finding of Fact No. 16 in the following respects:

(a) Said finding of value is immaterial and irrelevant in that the combined valuation of the four railroads involved, and the pretended combined net receipts earned by said four railroads does not constitute any basis upon which to prescribe a reasonable rate for any one or more of said railroads, parties to this cause.

(b) The finding of 7.28% net receipts is contrary to the evidence, and erroneous, for the reasons above stated and because computed on an erroneous rate base and by an erroneous method, as hereinbefore stated.

(c) The finding that the year of 1920 was a period of exceedingly high oprating cost is misleading, for the reason that it was also a peak year in volume of traffic, and the undisputed evidence shows that during the year 1921 traffic has fallen off to a much greater extent than expenses, so that the net result of operations for the year 1921 is more unfavorable to the carriers than the year 1920, notwithstanding the high operating costs of that year.

(d) It is not true, nor is there any evidence in the record to show that the carriers have treated a return of six per cent upon the aggregate value of their property as a whole as a fair or compensatory rate of return, either upon their entire traffic in the State of Washington, or upon their traffic in logs.

[fol. 54] 19. Finding of Fact No. 17 is not sustained by the evidence adduced at said hearing, but is contrary thereto.

20. Said Finding No. 17 contradicts other findings in the case, since in said Finding 17 it is found that the log traffic is not fairly comparable with any other commodity transported within the State of Washington, or with any other traffic in the United States, notwithstanding that in Finding 12 the Department has fixed a rate for the transportation of logs based upon the average rate for the transportation of all commodities on the systems of the four carriers involved, and ther-by said Finding 17 is conflicting with the other findings made by the Department, and overthrows and destroys the basis upon which the Department has pretended to prescribe a reasonable rate for the transportation of logs.

21. The Department erred in making Finding of Fact No. 18, for the reason that it is contrary to the evidence in every respect, and is unreasonable and unlawful.

22. Said Department erred in making its Finding of Fact No. 19, for the reason that the same is not supported by the evidence, but is contrary thereto, and said finding is unreasonable and unlawful for the reason that the act constituting the Department of Public Works does not authorize it to experiment with a confiscatory scale of rates on property of the carriers of this state for the period of one year, or for any period.

23. Finding of Fact No. 20 is unreasonable and unlawful and is not sustained by the evidence adduced at said hearing, but is contrary thereto in the following respects.

(a) There is no evidence that a reduction of log rates will stimulate the volume of the log traffic, and if there were any such evidence it would offer no just or valid ground for reducing the log rates to any extent.

[fol. 55] (b) There is no evidence that the rates prescribed will result in any increased volume of traffic, or that the volume of traffic will increase for any reason and there is no evidence that the rates prescribed will increase the earnings of the carriers of logs, or will yield revenue equal to that afforded by existing rates, nor is there any evidence that the rates prescribed will equal the return fixed by the Interstate Commerce Commission as fair and just, but the evidence shows that existing rates are less than reasonable, and the rates prescribed amount to an annual reduction of revenue which renders them confiscatory, as hereinafter set forth.

24. Finding of Fact No. 21 is unreasonable and unlawful and is not sustained by the evidence adduced at said hearing, but is contrary thereto in the following respects:

The evidence conclusively shows that the North Pacific Coast Freight Bureau Tariff No. 29 is not unjust, unreasonable, more than sufficient, or more than the traffic will bear, but does show on the contrary that the rates published in said tariff No. 29 will earn less than a reasonable return to the least favorably situated carrier, and to which said carriers are entitled as fair compensation for the

service rendered and a reasonable return upon the value of the property devoted thereto.

25. Finding of Fact No. 22 is not supported by the evidence, but is contrary thereto, and is unreasonable and unlawful.

26. The Department erred in making its Finding of Fact No. 23, for the reason that said finding of fact is not sustained by the evidence adduced at said hearing, but is contrary thereto in the following respects:

(a) The evidence does not show that cars equipped with bunks will permit of heavier loading, and therefore yield a greater revenue [fol. 56] to the carriers.

(b) The evidence does not show that it would be just or fair to place the minimum load for cars not equipped with steel bunks at 500 feet less than the minimum prescribed for cars so equipped.

(c) The evidence does not show that it would be just or fair to require the carriers to make a [illegible]r charge for cars not equipped with steel bunks, than for cars so e[illegible]ipped.

27. Said Department erred in making its Finding of Fact No. 24, for the reason that said finding of fact is not sustained by the evidence adduced at said hearing, but is contrary thereto in all respects and said finding is unreasonable and unlawful and beyond the authority and jurisdiction or the respondents in substituting an average minimum per shipment for the carload minimum contained in the present tariffs. Said finding prescribes a rule which will be discriminatory and preferential to the shipper of more than one car, *and prejudicial to the shipper of more than one car,* and prejudicial to the shipper of only one car, and is in excess of the authority of the Commission in that respect, and is ultra vires and void.

28. The Department erred in making its Finding of Fact No. 25, in that there is no evidence that the change in the method of computing minimums will reduce the carriers' revenues only $150,000 per year under the proposed scale of rates.

29. The Department erred in making its Finding of Fact No. 26, in that there is no evidence that the practice of the carriers with regard to scaling is not uniform, and there is no evidence and no finding that the practice in effect is unjust or unreasonable in any particular, and no evidence with respect to what other or different rule for scaling would be just, fair and reasonable.

[fol. 57] 30. Relators further allege that the order and findings of the Department of Public Works are illegal, unreasonable and void, in that the Department has attempted to find the average unit cost for freight operations on the four systems as a whole and has applied the figure thus ascertained to the log traffic in Western Washington on the lines of the several carriers, parties to this suit, and has attempted on that basis to fix and establish a rate to be charged by

the several carriers for hauling logs, without any regard to the value or cost of the service of any carrier, or what would be a reasonable rate to be charged by any one of the carriers individually. In so doing the Department of Public Works acted wholly without jurisdiction, and the order is illegal, null and void.

31. The Schedule of rates ordered into effect by the Department of Public Works is unlawful, unjust, unreasonable and confiscatory, and does not afford the relators, or any of them, just, reasonable or sufficient compensation, or any compensation, for the service rendered. The undisputed evidence shows that under existing rates each of the petitioners furnishes transportation for logs at less than actual operating cost. The order of the Department of Public Works will further reduce the annual revenue received by petitioners for hauling logs in various degrees, to-wit, will reduce the revenue now received by the Northern Pacific Railway Company in the sum of approximately ninety-one thousand dollars ($91,000), due to the difference in rates alone, in addition to which a further loss of not less than six per cent of the gross receipts from the log traffic, or about seventy-five thousand dollars ($75,000) will be entailed by the trainload minimums, together with a further loss of approximately forty-
[fol. 58] eight thousand dollars ($48,000), on account of the penalty for failure to furnish patent bunks, or the elimination of the charge now made therefor, where bunks are furnished.

The Great Northern Railway Company will sustain an annual loss on account of the reduction in its rates of approximately ninety-three thousand dollars ($93,000), together with a further loss on account of the trainload minimum of approximately nineteen thousand dollars ($19,000) and a further loss of about ten thousand dollars ($10,000), on account of the patent bunk feature.

The Chicago, Milwaukee & St. Paul Railway Company will sustain an annual loss of approximately two hundred fifty three thousand dollars ($253,000) by reduction of its rates, and a further loss of approximately $— on account of the trainload method of computing minimums, and a further loss of approximately eighteen thousand dollars ($18,000) on account of the patent bunk feature of the order.

The Oregon-Washington Railroad & Navigation Company will sustain an annual loss on account of the reduction of their rates of approximately forty thousand dollars ($40,000) and further loss of about twenty-five thousand dollars ($25,000) on account of the trainload basis for computing minimum loads.

Thereby each of the relators will be required to transport logs at much less than cost, and thereby their property will be taken without due process of law, in violation of the Fourteenth Amendment to the Constitution of the United States, and in violation of the Constitution of the State of Washington.

[fol. 59] 32. Said order of the Department will further cause and create an illegal preference and discrimination in favor of the intrastate commerce performed by the carriers in the transportation of sawlogs within the State of Washington, and an illegal prejudice

against the interstate commerce performed by said carriers between said State of Washington and other states, contrary to the act of Congress known as the Transportation Act, 1920.

33. Said order and findings are unreasonable, unlawful and beyond the authority and jurisdiction of the respondents, in requiring the relators to publish a rule that where cars furnished for log shipments are not equipped with steel bunks a deduction of fifty cents (50¢) per carload shall be made from the rate otherwise applicable.

34. The Relators show to the court that Tariff No. 29 cancelled by the Department of Public Works, names rates to which the petitioners and each of them are entitled, as no more than fair and reasonable compensation for the service rendered in the transportation of logs; that said tariff provides rates which will not return to any of the most favorably situated carriers in excess of three per cent (3%) on the value of the property used, based upon the assumption that the unusually heavy traffic of the year 1920 will remain constant, but in truth and in fact said traffic has fallen off, and was heavier in the year 1920 than for 1921, or than it will be in any normal year. With ragard to the other carriers, parties to this suit, said tariff will not return revenue equal to three per cent (3%) on the value of the property used, and the order of the Department in cancelling said tariff as excessive, is unreasonable, unlawful and beyond its authority, and should be set aside.

[fol. 60]

IX

Petitioners further state that they and each of them will sustain a great and irreparable injury, unless this court grant a supersedeas of the unlawful order of the Department of Public Works, in that petitioners, and each of them, will be forced to transport great quantities of logs at unreasonably low and confiscatory rates, and will sustain a loss, as hereinbefore stated, amounting to several hundreds of thousands of dollars. It would be impossible to recover the difference between the unreasonably low and confiscatory rates prescribed by the Department's order and the fair and reasonable rates to which petitioners are entitled under the law, for the reason that the law does not provide for such a recovery, and the further reason that it would involve the bringing of innumerable suits against hundreds of different parties, and in many cases for sums so small that the suits would not be justified, and in many other cases the parties liable could not be reached by the process of the court, and would become insolvent, so that as a practical matter the petitioners will sustain a total loss of said sums of money, in the event the Department's order be not superseded.

Petitioners are able to give several bonds for the amounts that may be fixed by the court, conditioned to promptly refund any charges collected from their respective patrons, upon the conclusion of this litigation, in the event that this writ of review be not sustained, and thereby the rights of all parties dealing with petitioners will be protected, whereas if the order be not suspended, petitioners

will suffer a total and irreparable loss, and the shippers dealing with them will receive a charge to which they are not entitled.

[fol. 61] Petitioners further state that under the general laws of this state all parties in like circumstances are given a right of supersedeas and an effectual right of court review, and if petitioners be denied the supersedeas they will suffer a great and irreparable wrong, and their property will be confiscated and taken without due process of law, and they will be deprived of the equal protection of the laws, in violation of the Fourteenth Amendment to the Constitution of the United States and of the constitution of the State of Washington.

Wherefore, relators pray that said unlawful findings and order of the Department of Public Works be reversed and set aside, and that the Tariff No. 29, heretofore filed by the petitioners, be put in full force and effect.

Relators further pray that inasmuch as the several objections in this petition made to the proceedings and to the findings and order of said Department were taken and urged before said Department in the course of said hearing, and whereas all of the matters and things hereinbefore set forth will more fully appear and be exhibited by the record on file in the office of said Department, that therefore this court issue its writ of review, requiring and commanding said Department to certify to this court the entire record in said proceedings, including the findings and orders of said Department above referred to, and all of the orders entered in this proceeding, together with a record of all the testimony taken and preserved in writing at the hearings, and all exhibits of every kind or nature offered or received in connection therewith, together with the complaint, citation, answers and pleadings of the parties, and said North [fol. 62] Pacific Coast Freight Bureau Tariff No. 29, and that upon the record being returned to this court, the court inquire into the reasonableness and lawfulness of the said findings and order, and grant a full review and hearing of said proceedings, and that the many manifest errors herein contained and complained of be corrected, and that said findings and orders so contrary to law and unreasonable as aforesaid, be in all things set aside and annulled.

Petitioners further pray for such other and further relief as may be meet in the premises.

Northern Pacific Railway Company, by Geo. T. Reid, J. W. Quick, L. B. Da Ponte (Its Attorneys). Great Northern Railway Company, by Thomas Balmer, Edwin C. Matthias, Its Attorneys. Chicago, Milwaukee & St. Paul Ry. Co., by F. M. Dudley. Oregon Washington Railroad & Navigation Company, by A. C. Spencer, W. A. Robbins, Its Attorneys. North Pacific Coast Freight Bureau and S. J. Henry, as Agent Thereof, by Thomas Balmer, L. B. Da Ponte, Their Attorneys. Geo. T. Reid, J. W. Quick, L. B. Da Ponte, Thomas Balmer, Edwin C. Matthias, F. M. Dudley, A. C. Spencer, W. A. Robbins, Attorneys for Petitioners and Relators.

[fol. 63] IN SUPERIOR COURT OF THURSTON COUNTY

[Title omitted]

ORDER OF SUPERSEDEAS—Filed Mar. 20, 1922

On the 23rd day of February, 1922, the application of the relators above named for a supersedeas of the order of the Department of Public Works made in this cause came on to be heard.

The relators appeared by their counsel, and the respondents appeared by the assistant Attorney General and it appearing to the court that due notice of this application had been given, and the court having heard the evidence offered by the respective parties for and in opposition to the said supersedeas prayed for, and it appearing to the court that on the first day of February, 1922, the Department of Public Works made a certain order in causes Nos. 5159 and 5330 consolidated, which order was served on the third day of February, 1922, wherein and whereby the Department of Public Works ordered material reductions in the rates, rules and regulations of the four relator companies applicable to the transportation of logs within the State of Washington.

And it further appearing from the evidence offered by the relators, more particularly the evidence of S. Greengard, of O. P. Kellogg, of [fol. 64] F. A. Cleveland, A. J. Grummett, J. C. M. Dodds and of Henry Gray, that the relators will sustain a great and irreparable injury in the sum of approximately five hundred thousand dollars ($500,000.00) annually under and by virtue of the order of the Department of Public Works so reducing said rates, rules and regulations applicable to the transportation of saw-logs in Washington.

And it further appearing that of said aggregrate loss in the sum of $400,000.00, the loss of the Chicago, Milwaukee & St. Paul Railway Company amounts to the sum of approximately $271,000.00, and that the loss of the Northern Pacific Railway Company will amount to the sum of approximately $200,000 and that the loss of the Great Northern Railway Company will amount to the sum of approximately $120,000 and the loss of the Oregon Washington Railroad and Navigation Company will amount to the sum of approximately $40,000; and it further appearing to the court that there are a large number of shippers on the lines of the several companies, aggregating approximately three hundred, and that it is impracticable for the said railway companies to recover from said shippers the said loss accruing to them under the operation of the order of the Department of Public Works, necessitating a multiplicity of suits, in many instances for amounts that would not justify the costs that would be incurred, against defendants, and their solvency at the time they might be called on to respond is doubtful; therefore,

It is hereby ordered, adjudged and decreed by the court that the said order of the Department of Public Works dated the 1st day [fol. 65] of February, 1922, and each and every part thereof, except in so far as said order cancels that certain tariff No. 29 referred to in said order, be and the same is hereby superseded and suspended

pending the hearing of this court on the return to be made by the Department of Public Works to the writ of review heretofore sued out herein and the final determination of this cause in this court.

It is further ordered, adjudged and decreed that the relator, Chicago, Milwaukee & St. Paul Railway Company, execute and file with the Clerk of this court a bond payable to the State of Washington for the benefit of whom it may concern, conditioned as required by law in the sum of $40,000.00; that the Northern Pacific Railway Company file a similar bond in the sum of $25,000.00; that the Great Northern Railway Company file a similar bond in the sum of $20,000.00, and that the Oregon-Washington Railroad and Navigation Company file a similar bond in the sum of $7,000.00.

It is further ordered, adjudged and decreed that this order and said bond be dated and take effect nunc pro tunc as of the 23rd day of February, 1922 and this supersedeas be in full force and effect from and after said date and until the final determination of this cause as aforesaid.

John M. Wilson, Judge.

This order is entered as of the 20th day of March, 1922, and an exception allowed to the Respondents.

John M. Wilson, Judge.

[fol. 66] IN SUPERIOR COURT OF THURSTON COUNTY

[Title omitted]

JUDGMENT—Filed Sept. 25, 1922

The above entitled cause having come on regularly to be heard on the 25th and 26th days of May, 1922, upon the writs of review heretofore issued herein and upon the evidence and exhibits introduced before the respondents and certified to by them, and upon the return of said respondents to the said writs, the relator, Northern Pacific Railway Company, being represented by George T. Reid, J. W. Quick, and L. B. da Ponte, the relator, Chicago, Milwaukee and St. Paul Railway Company, being represented by F. M. Dudley, the relator, the Great Northern Railway Company, being represented by Thomas Balmer, and the relator, Oregon-Washington Railroad & Navigation Company, being represented by A. C. Spencer and W. A. Robbins, the respondents being represented by L. L. Thompson, attorney general, Raymond Clifford, assistant attorney general, Scott Z. Henderson and Stephen V. Carey, and the court having heard the arguments of counsel for the respective parties and having examined [fol. 67] and considered the records and files in the above entitled cause, including the state of Washington, in its causes numbered 5159 and 5330 of the files of said department, certified and transmitted by the respondents, in response to the above mentioned writs of review; and the court being fully advised in the premises, now, therefore, it is hereby

Ordered, adjudged and decreed that the order of respondents in their consolidated causes numbered 5159 and 5330, dated February 1, 1922, and entitled The Department of Public Works of Washington, Complainant, vs. The Northern Pacific Railway Company, The Great Northern Railway Company, the Chicago, Milwaukee & St. Paul Railway Company, and The Oregon-Washington Railroad & Navigation Company, North Pacific Coast Freight Bureau, S. J. Henry, Agent, Respondents, be, and the same is hereby in all respects sustained and affirmed, and the above entitled causes and the writs of review issued hereunder are hereby dismissed, to all of which the plaintiffs duly and regularly except, and are allowed an exception.

Done in open court this 25th day of September, 1922.

D. F. Wright, Judge.

Supersedeas postponed for further hearing.

D. F. Wright, Judge.

[fol. 68] In Superior Court of Thurston County

No. 8428-8429

[Title omitted]

Order of Supersedeas Pending Appeal—Fied Oct. 3, 1922

This cause having come on to be heard upon the petition of the relators above named for an order suspending the judgment of this court dated the 25th day of September, 1922, pending the hearing of the appeal heretofore perfected in this cause, and all parties having appeared, and the court, having considered the said petition and the evidence, is of the opinion that the supersedeas applied for should be allowed and finds that great and irreparable damage will be sustained by petitioners unless the judgment of this court be suspended pending the appeal in case the judgment appealed from be reversed in that the Northern Pacific Railway Company will sustain a great and irreparable loss from the operation of the schedule of rates prescribed by the order of the Department of Public Works in the sum of approximately $200,00- per annum; the Chicago, Milwaukee & St. Paul Railway Company in the sum of approximately $271,000 per annum; the Oregon-Washington Railroad & Navigation Company in the sum of approximately $40,000 per annum, and the [fols. 68½-145] Great Northern Railway Company in the sum of approximately $120,000 per annum.

It is therefore ordered, adjudged and decreed by the court that the judgment entered herein on the 25th day of September, 1922, affirming the said order of the Department of Public Works, is hereby suspended, pending the appeal of petitioners to the Supreme Court of the State of Washington, as provided by Section 88 or the Laws of 1922, Chapter 117.

This order is conditioned upon the filing by petitioners of bonds

in the following sums, to wit: Northern Pacific Railway Company in the sum of $132,000; Great Northern Railway Company in the sum of $88,000; Chicago, Milwaukee & St. Paul Railway Company, in the sum of $148,000, and Oregon-Washington Railroad & Navigation Company, in the sum of $32,000, and upon the filing of the said bonds and the approval thereof by the court the said judgment of this court, dated the 25th day of September, 1922, is hereby suspended pending said appeal.

The respondents are allowed an exception.

Dated the 3 day of October, 1922.

D. F. Wright, Judge.

[fol. 146] IN SUPREME COURT OF WASHINGTON. EN BANC

No. 17689

NORTHERN PACIFIC RAILWAY COMPANY ET AL., Appellants,

v.

THE DEPARTMENT OF PUBLIC WORKS et al., Respondents

OPINION—Filed July 18, 1923

The public service commission, now the board of public works, on its own petition seeks to establish just and proper rates on logs within the state of Washington. The rates were originally established by the carriers themselves and were discriminating and preferential and lacking in uniformity. On January 25, 1918, by order No. 28 the director general increased the freight rates twenty-five per cent throughout the United States. In the transportation act of February 28, 1920 (41 Stat. 456), providing for the termination of federal control Congress recognized the necessity for higher freight rates and authorized the Interstate Commerce Commission to establish rates which would earn a fair return upon the value of the railway property. A fair return was declared to be five and one-half per cent of such aggregate value and one-half of one per cent for improvements. Under the power so granted and after an investigation the Interstate Commerce Commission on July 29, 1920, entered Ex Parte 74, found in 58 I. C. C. p. 220, in which the railways of the United States were divided into four groups and increases in rates were allowed as follows: Eastern group forty per cent; Southern group twenty-five per cent; Western group thirty-

[fol. 147] five per cent; Mountain Pacific group twenty-five per cent.

The State of Washington being in the Mountain Pacific group and having an increase of twenty-five per cent, the public service commission in cause No. 5092, for the sake of uniformity, to meet the critical emergency then existing, and to carry out the intent of the 1920 transportation act and the order of the Interstate Commerce Commission, granted an increase of twenty-five per cent on all intrastate freight rates and called the attention of the carriers to the dis-

criminatory rates and directed the carriers to readjust said rates upon a proper basis.

No action having been taken by the carriers to adjust the rate the public service commission filed its complaint charging that the rates, rules, regulations and charges were unreasonable, unjust, discriminatory, prejudicial and preferential and ordered that hearings be had to determine what rates should be prescribed for the intrastate movement of logs within the state. After hearing the testimony the department of public works entered its findings of fact and order establishing a uniform distance scale of rates for the intrastate transportation of logs within the state of Washington. The same was ordered to remain in effect during an experimental period of twelve months or until further order of the department.

Being dissatisfied with the order of the board of public works the carriers secured a writ of review from the superior court of Thurston county. That court, after a hearing, entered judgment affirming the order of the commission, from which judgment the carriers have prosecuted this appeal.

It is first contended that the court erred in holding that the carriers had the burden of proof. The record shows that there was sufficient evidence introduced to make a prima facie showing that [fol. 148] the rates were discriminatory and unlawful and the carriers were properly required to sustain the burden in support of their new proposed tariff No. 29 under sec. 10424, Rem. Comp. Stat., which provides as follows:

"At any hearing involving any change in any schedule, classification, rule or regulation the effect of which is to increase any rate, fare, charge, rental or toll theretofore charged, the burden of proof to show that the changed schedule, classification, rule, or regulation, or the increased or proposed increased rate, fare, charge, rental or toll is just and reasonable shall be upon the public service company."

It is contended that the board of public works erred in basing its findings upon the cost of transportation determined by an average of the transportation costs of the four appellant railroads; that in determining what are fair, just, reasonable and sufficient rates for services by any carrier the costs, revenues, etc. of that particular carrier must be considered and not the average or combined costs and revenues of a number of carriers; that the department took as a basis of its calculation of transportation costs a unit operating cost supposed to represent the average unit cost upon four different systems and then sought to determine upon that basis what rates were necessary to give to the individual carrier just, reasonable and sufficient return for its services and thus attempted to do that which was an impossibility in logic and prohibited by law.

It is admitted that the cost and revenue of one road would not be the same as the cost and revenue of another road. It is a fact, however, that the four carriers serve practically the same territory and they themselves submitted a uniform distance tariff rate. Railroads serving the same territory must have the same rate. Other-

wise the one having the lower rate would secure a larger portion of the traffic. The carriers would not seriously object to a uniform distance tariff rate if it would fully compensate them for their [fol. 149] services. This objection will therefore be removed if it is determined that the proposed rates are compensatory.

It is next contended that the department erred in basing its findings as to the cost of transportation of logs upon the average cost of transportation per ton mile upon the systems of the carriers. The mileage of the carriers in the state of Washington as found by the department of public works is about eighteen per cent of the entire mileage, and the log traffic does not move over all of the Washington mileage.

It is contended that the average system cost of transportation of one thousand tons per mile is much below the average cost of transportation of one thousand tons per mile within the state of Washington and still farther below such cost upon divisions carrying the great bulk of the logs.

It is admitted that it is impossible to determine the exact cost of transporting any one commodity. It is claimed that the most approved method of apportioning the entire cost as between different commodities is the car mileage or ton mile basis. The object is to obtain as accurately as possible the actual cost of the transportation. By including the entire system there is included the transportation of every commodity on every part of the system. The transcontinental freight by virtuue of its long haul and the transportation within the Mississippi valley where level grades prevail and fuel is cheap moves with comparative cheapness as compared with the transportation in the state of Washington. And it is claimed that the use of such cost included in determining the system ton mile cost as factors to determine the cost within the state of Washington is inadmissible.

It is also claimed that the cost of all transportation includes two factors: First, the cost of picking up and delivering the freight at points of origin and destination, known as the initial and delivery costs; and second, the line haul; that the initial and delivery costs [fol. 150] are unaffected by the length of the haul; that the cost per ton mile increases as the length of haul decreases. It is admitted, however, that the exact ratio between initial and delivery costs and line haul costs has not been determined.

Respondent claims that the branch lines and expense incurred thereon are peculiarly a feature of terminal division operation; that their existence is essential to afford sufficient volume of traffic to render main line operation possible and profitable; that the intrastate commerce is essentially an aggregation of short hauls while interstate commerce predominates in transcontinental movements; that so far as revenues are concerned the carriers recognize the composite character of the freight receipts in any state and by mileage assignments spread these receipts which flow from the operation as a whole over the entire system, and insists that the expense particularly incurred within the state of Washington in interstate assembly and distribution should be extended over the entire system.

It must be conceded that intermediate divisions of transcontinental systems where such divisions originate little traffic, would be almost devoid of traffic were it not for originating and terminal divisions and the relations between intrastate and interstate commerce are interdependent so far as receipts and expenses are concerned; that the Washington branch line costs are not out of proportion to other branch line costs, and that the expense of moving logs is approximately the same as that for any other traffic moving in large volumes.

The board found also that as a whole more manufactured lumber is being handled by the carriers than the carriers are transporting in the form of logs.

The rate on a branch line cannot be determined by the revenue [fol. 151] and expense of operation upon the branch line alone since such a rate would be prohibitive. The relation of a branch line to the main line is valuable in originating and delivering traffic to and from the main line, as stated in the case of St. Louis, etc. Ry. Co. v. Gill, 39 L. Ed. 567, wherein the court said:

"The company cannot claim the right to earn a net profit from every haul, section, or other part into which the road might be divided, nor attack as unjust a regulation which fixed a rate at which some such part would be unremunerative."

And in the case of Chesapeake & Ohio Ry. v. Pub. Serv. Com., 83 S. E. 288, the supreme court of West Virginia said:

"While the line in question may not and perhaps will not as a segment yield a net profit to the operator on the passenger traffic, it will serve as a feeder to the main lines, and add a valuable increment to the gross returns of the system."

We are satisfied that the board of public works proceeded upon a fundamentally right basis in determining that the costs of the entire system should be taken into consideration in determining the cost in the state of Washington since interstate and intrastate commerce are interdependent upon each other. One could not exist extensively without the other.

4. The fourth assignment addressed to finding 12 claims error by reason of the fact that the income tax is not included as part of the operating expenses in estimating the net income in preserving to the carriers six per cent return upon the amount invested. The Interstate Commerce Commission in its rate reduction order of May 16, 1922 (68 I. C. C. 676) in which it determined that five and three-quarters per cent of the aggregate value of the railway property of carriers would constitute a fair return thereon on and after March 1, 1922, amending Ex Parte 74, 58 I. C. C. 220, allowing six per cent, found as follows:

"We may observe that a fair return of 5.75 per cent, representing an aggregate annual net railway operating income arrived at after deducting, among other things, the Federal income tax on a return

of 6 per cent would be approximately the equivalent of a fair return [fol. 152] of 6 per cent, out of which the Federal income tax was payable."

The allowance of the board of public works of six per cent to the carrier is sufficient to pay the 5.75 per cent including the income tax as part of the operating expenses.

It is contended that the department erred in prescribing a penalizing lower rate for failure to furnish cars equipped with patent bunks.

Sec. 9 of the public service law (Ch. 117, Laws of 1911, p. 546-547) provides as follows:

"Every common carrier shall construct, furnish, maintain and provide, adequate and sufficient service facilities, * * * and equipment to enable it to promptly, expeditiously, safely and properly receive, transport and deliver all persons or property offered to or received by it for transportation, and to promote the safety, health, comfort and convenience of its patrons, employees and the public."

We are satisfied that under this provision the board of public works was authorized to direct that the carrier provide the log bunks as part of the equipment to enable the carrier to promptly, expeditiously, safely and properly receive, transport and deliver the logs.

The balance of the thirty-four assignments of error involve questions of fact and those findings are controlling unless they have been arbitrarily reached without full and due consideration of all the facts or have been arrived at upon a manifestly wrong basis. We said in the case of Puget Sound Elec. R. vs. Railroad Commission, 65 Wash. 98:

"The inquiry was of such a nature as to call largely for expert testimony, and the findings made are necessarily of the same nature. In such a case great consideration should be given the findings of that body to whom the state has primarily given the right and authority to determine questions of this character. Such findings should not be disturbed unless they bear evidence of having been arbitrarily reached and without a full and due consideration of all the controlling facts. Their determination calls for the exercise of economic as well as legal principles. Courts may well review the questions submitted, in so far as they suggest the application of legal principles. In so far as they suggest the enunciation of proper economic rules, they must defer largely to those who, by study, experience, and calling, are in a better situation to determine what is and what is not a proper method of determination."

[fol. 153] We also said in State ex rel. G. N. R. Co. v. Public Service Com., 76 Wash. 625, 137 Pac. 132:

"Such decisions are peculiarly within the province of the commission to make, and 'its findings are fortified by presumptions of truth

due to the judgments of a tribunal appointed by law and informed by experience.' Interstate Commerce Commission v. Chicago, R. I. & P. R. Co., 218 U. S. 88."

In this case the Board of Public Works has attempted to establish reasonable rates to supersede the discriminatory and unreasonable rates and in its order provides for a test period within which the reasonableness or unreasonableness of the rates can be established.

The difficulty in attempting to measure the reasonableness of the charges by reference to the cost of transportation is admitted and the only true test is the actual operation under the proposed rates, and as stated in Landon v. Public Utilities Com., 234 Fed. 152-157:

"It has frequently been the practice of courts when one came to it to ask such equitable relief as is here sought to require as a condition to listening to the application, that the rates fixed by the commission should be first tested, and then the matter should be determined as to whether or not they were confiscatory."

And in the case of Des Moines Gas Co., v. Des Moines, 238 U. S. 153, it was said:

"Nor do we think that there was error in refusing an injunction upon the conclusion reached that a return of six per cent per annum on the valuation would not be confiscatory. This is especially true in view of the fact that the ordinance was attacked before there was opportunity to test its results by actual experience."

We find that the rule laid down in the case of Northern Pacific Ry. Co. v. State of North Dakota, 216 U. S. 579, 54 L. Ed. 624, is properly applicable to this case, wherein it was said:

"The great difficulty in the attempt to measure the reasonableness of charges by reference to the cost of transporting the particular class of freight concerned is well known and often has been remarked. It seems to us that the nearest approach to justice that can be made at this time is to follow the precedent of Wilcox v. Consolidated Gas Co., 212 U. S. 19, 53 L. Ed. 382, 29th Sup. Ct. Rep. 192, as nearly as may be and affirm the decree, but without prejudice to the right of the [fol. 154] railroad company to reopen the case by appropriate proceedings, if after adequate trial, it thinks it can prove more clearly than at present the confiscatory character of the rates * * *."

We find that there is proper evidence to support the order of the board of public works. The court has not the authority or right to substitute itself for the rate-making body and attempt to perform such functions. "Rate making is no function of the courts and should not be attempted either directly or indirectly." Newton v. Consolidate Gas Co., Vol. 42, No. 10, p. 264, Sup. Ct. Rep. Neither is it within the province of the court to consider the weight of the evidence or wisdom of the order.

As stated by the supreme court of the United States in the case of

Akron, C. & Y. Ry. Co. v. United States, 43 Sup. Ct. Rep. No. 9, at p. 278:

"To consider the weight of the evidence, or the wisdom of the order entered, is beyond our province."

The order complained of provides for an experimental period and if the tariff is found by actual trial to be oppressive or confiscatory a rehearing may be had at any time before the board of public works.

The judgment is affirmed.

Pemberton, J.

We concur: Parker, J. Tolman, J.
We concur in the result. Bridges, J. Mitchell, J.

[fol. 155] IN SUPREME COURT OF WASHINGTON

CONCURRING OPINION

HOLCOMB, J., concurring:

I cannot fully concur in all that is said in the foregoing opinion, believing that much of it is unnecessary; but do concur in the result, for the reason that the order of the Board of Public Works did no more than provide a test period within which the reasonableness or unreasonableness of the rates adopted should be established. The court was therefore justified in doing what was stated in Landon v. Public Utilities Com. 234 Fed. 152, require that the rates fixed by the Commission be first tested, and then the matter be determined as to whether or not they proved confiscatory. This is exactly such a case. The carriers themselves could not determine definitely what in every respect should be considered as bases for rate making. In a case of such general public concern, and of such far-reaching importance to the carriers, nothing could be fairer than that an experimental order, for a reasonable period, be made as was made by the Department. The result is therefore right.

Holcomb

[fol. 156] IN SUPREME COURT OF WASHINGTON

DISSENTING OPINION

I am unable to agree with the conclusion reached by the majority in this cause. It is my opinion that the department of public works proceeded upon bases fundamentally wrong in fixing the rates the rail carriers involved may charge for transporting the commodity here under consideration. Some of the reasons for so concluding I will notice as briefly as I may.

The department, after reciting that the exhibits and calculations of the carriers showed a loss from the carriage of logs in the state

of Washington at their present existing rate for the year 1920, (the year preceding the date of the hearing before the department) found that there had been an actual profit from the carriage of logs during the year named of $818,448. It reached this result by the following method. I quote from their findings:

"In arriving at the net revenue from log traffic earned by the four principal carriers within the state during 1920, of $818,448, the following method was used:

Gross revenue from log transportation	$2,859,172	
Incidental freight revenue assigned to log transportation	56,232	
Total revenue		$2,915,404
Operating expense assigned to log transportation	$1,923,198	
Taxes assigned to log transportation	173,758	
Total expense		$2,096,956
Total net		$818,448

"In arriving at the operating expense assigned to the log traffic, the cost of freight operation within the State of Washington was calculated upon the basis of cost per 1,000 gross ton miles of handling all freight upon the combined systems of the four principal carriers, and in this manner the total cost of freight operation assignable to the State of Washington was found to be $38,678,870, which is equivalent to a unit operating cost of $5,321, per 1,000 revenue gross ton miles handled by the four principal carriers within the state during the year in question. On this basis the cost of handling the log traffic within the state during the year by such carriers was $1,923,198. The taxes assigned by the log traffic are one-half of those contended for by the carriers after the elimination of income taxes. All of the figures used in this calculation are contained in the annual reports filed with us by the carriers, or were taken from the exhibits supplied by the carriers in this case."

[fol. 157] It is my opinion that the department here erred in its method of procedure. The first reason for so concluding is that the department went too far afield in its search for a unite of measurement. The jurisdiction of the department to fix rates of carriage for either passengers or freight is confined solely to the intrastate traffic of the carriers. With their interstate traffic, or with their traffic in other states, it has nothing to do. The power to regulate such traffic is vested exclusively in other bodies with whom the department in this state has not even an advisory control. The conditions under which a carrier is permitted to conduct its traffic must always materially affect its cost. The number of trains it must run within a given time, the terminal facilities it must provide, the number of train operatives it is required to furnish, and like matters

all enter into the cost, and, as these are necessarily different in the different jurisdictions, any unit of measurement based upon the cost of hauling over the entire system cannot be a correct unit to measure the cost of hauling a particular commodity in this state. In my opinion, the department should have confined its inquiries to the cost of haul of freight traffic within this state. This, as I understand it, is the rule announced by the supreme court of the United States in Smyth v. Ames, 169 U. S. 446. A quotation from the opinion will make the point clear. The court there used this language:

"It is further said, in behalf of the appellants, that the reasonableness of the rates established by the Nebraska statute is not to be determined by the inquiry whether such rates would leave a reasonable net profit from the local business affected thereby, but that the court should take into consideration, among other things, the whole business of the company, that is, all its business, passenger and freight, interstate and domestic. If it be found upon investigation that the profits derived by a railroad company from its interstate business alone are sufficient to cover operating expenses on its entire line, and also to meet interest, and justify a liberal dividend upon its stock, may the legislature prescribe rates for domestic business that would bring no reward and be less than the services rendered are reasonably worth? Or, must the rates for such transportation as begins and ends in the State be established with reference solely to the amount of business done by the carrier wholly within such State, to the cost of doing such local business, and to the fair value of the property used in conducting it, without taking into consideration the amount and cost of its interstate business, and the value of the property employed in it? If we do not misapprehend counsel, their argument leads to the conclusion that the State of Nebraska could legally require local freight business to be conducted even at [fol. 158] an actual loss, if the company earned on its interstate business enough to give it just compensation in respect of its entire line and all its business, interstate and domestic. We cannot concur in this view. In our judgment it must be held that the reasonableness or unreasonableness of rates prescribed by a State for the transportation of persons and property wholly within its limits must be determined without reference to the interstate business done by the carrier, or to the profits derived from it. The State cannot justify unreasonably low rates for domestic transportation, considered alone, upon the ground that the carrier is earning large profits on its interstate business, over which, so far as rates are concerned, the State has no control. Nor can the carrier justify unreasonably high rates on domestic business upon the ground that it will be able only in that way to meet losses on its interstate business. So far as rates of transportation are concerned, domestic business should not be made to bear the losses on interstate business, nor the latter the losses on domestic business. It is only rates for the transportation of persons and property between points within the State that the State can prescribe; and when it undertakes to prescribe rates not to be exceeded by the carrier, it must do so with reference exclusively

to what is just and reasonable, as between the carrier and the public, in respect of domestic business. The argument that a railroad line is an entirety; that its income goes into, and its expenses are provided for, out of a common fund; and that its capitalization is on its entire line, within and without the State, can have no application where the State is without authority over rates on the entire line, and can only deal with local rates and make such regulations as are necessary to give just compensation on local business."

See also The Minnesota Rate Cases, 230 U. S. 352, where the case is cited with approval upon this point.

Another reason for concluding that the department erred is that the rule adopted, if permissible, would furnish no just rule of measurement for hauling the particular commodity here in consideration. Some of the reasons for so concluding are these: The average length of haul for logs is, in the State of Washington, but little more than thirty miles, while the average length of haul of general freight over the combined system of the railways involved is several hundred miles, and it is conceded that the cost of haul decreases as the length of haul increases. The rule takes no account of the difference in cost of hauling over the tortuous, winding, heavily graded road beds in the mountainous regions of Washington and the cost of hauling over the straight and level road beds of the great plains of the middle West, yet this also is an element concededly affecting the cost. It takes no account of the difference in movement of empty cars between the hauling of logs and the hauling of general freight, although it was shown that rolling stock fitted for hauling logs can be used for no other purpose while so fitted, and that the consequent [fol. 159] movement of empty cars is always greater in proportion to loaded cars than it is in the hauling of general freight; the percentage in the one case equalling fifty, while in the other it is about thirty three and one-third. It takes no account of the cost of upkeep of the rolling stock; the percentage of breakage and damage to the rolling stock devoted to the log traffic being greater than it is in any other. The rule takes no account of the fact that the movement of logs in the State of Washington is principally upon branch lines—the ratio between branch and main lines being as 75 is to 25—and that the cost of haul upon branch lines is substantially twice as great per ton mile as it is upon main lines; and it takes no account of the somewhat abnormal number of empty cars required to originate one loaded car.

All these conditions were shown by the evidence, and, clearly, each of them tends to show that the cost of hauling logs in the State of Washington, is greater per thousand gross ton miles than is the average cost of hauling general freight over the combined systems of the railway companies. Indeed, a statistician of one of the railway companies presented somewhat elaborate tables by which he sought to show the cost of hauling on the lines of his company one thousand gross tons of logs one mile. His deductions were that the cost was $7.61 per mile as against $5.321 as found by the department. I quote his figures with more confidence since, as I under-

stand the record, his method of deduction met with the approval of the distinguished traffic expert now in the employ of the department, and who has so ably and so long served the state in that capacity.

Another reason is that the department, in fixing its unit of haul, purposely excluded the federal taxes paid by the railway companies. That this is an expense necessarily to be taken into consideration was decided by the supreme court of the United States in Galveston Electric Co. v. Galveston, 258 U. S. 388.

The department was of the opinion that operation for a limited time under the rates fixed by it would of itself determine whether or not the rates were reasonable and just, and this seems to have been [fol. 160] in some degree a controlling influence with the majority of this court. But I am afraid this consideration is going to prove illusory. If the earnings under the present traffic rates do not prove the reasonableness of the cost of haul, I am unable to see how the earning under a materially reduced rate is going to prove so. There is but one proper way to determine the reasonableness of the cost of haul, and that is, to take into consideration all of the elements that enter into the cost. The earnings from the haul is only one of such elements, and at the end of the probationary period the department, it seems to me, is going to be confronted with the same problem that now confronts it. I concede, of course, that had the order related to the entire intrastate traffic of the companies involved, their gross earnings from the combined traffic, compared with the gross cost of haul, would in some degree determine the reasonableness of the rates fixed. But the case here *in* not this. There is here a fixing of a rate upon a single commodity, and nothing but a general inquiry which the department is as well prepared now to make as it will be after the test period can determine the reasonableness of the rate.

There are other objections to the order which I think are worthy of consideration, but I have not the time, nor do I think the necessities of the case require that I pursue the inquiry further. In passing, I will say that I fully appreciate the difficulties that confront a rate-makin body when it attempts to determine the cost to a carrier of hauling a single commodity. Owing to the many different elements that enter into such cost, which are common to the entire traffic and which at best can only be approximately apportioned, there is no rule by which it can be definitely ascertained. I appreciate also that the record discloses that the members of the department gave to the consideration of the question much earnest thought and careful consideration but I feel that they have considered matters that ought not to have been considered, and have excluded others [fol. 161] that ought to have been included, and for this reason alone I conclude that error has entered into their order.

In my opinion, the judgment appealed from should be reversed and the cause remanded to the department for further consideration.

Fullerton, J.

We concur in the views expressed by Judge Fullerton. Main, C. J. Mackintosh, J.

[fol. 162] IN SUPREME COURT OF WASHINGTON

[Title omitted]

ORDER OVERRULING PETITION FOR REHEARING AND PETITION FOR A SUPPLEMENTAL OPINION ON MOTION TO DISMISS.

In this cause the court having duly considered the following:

Petition of the appellants, supplemented by letter of counsel, for a rehearing;

The respondents' answer to the petition for a rehearing;

Answer of amici curiæ to the petition for a rehearing;

Petition of the respondent Cady Logging Company for a supplemental opinion on motion to dismiss;

It is ordered that the said petitions be and they hereby are denied.

By the Court:

John F. Main, Chief Justice.

[fol. 163] IN SUPREME COURT OF WASHINGTON

[Title omitted]

JUDGMENT—Filed Nov. 20, 1923

This cause having heretofore — submitted to the court, upon the transcript of the record of the Superior Court of Thurston County, and upon the argument of counsel, and the Court having fully considered the same and being fully advised in the premises, it is now, on this 20th day of November, A. D. 1923, on motion of John H. Dunbar Esquire, of counsel for respondents considered, adjudged and decreed, that the judgment of the said Superior Court be, and the same is hereby affirmed with costs; the petition for rehearing denied and that the said Department *fo* Public Works et al. have and recover of and from the said Northern Pacific Railway Co., Great Northern Co., Chicago, Milwaukee & St. Paul Railway Co., and the Oregon, Washington, Railroad & Navigation Co. and from National Surety Co. surety the costs of this action taxed and allowed at One Hundred & Sixty-Seven & 55/100 Dollars, and that execution issue therefor. And it is further ordered, that this cause be remitted to the said Superior Court for further proceedings, in accordance herewith.

[fol. 164] IN SUPREME COURT OF WASHINGTON

[Title omitted]

PETITION FOR WRIT OF ERROR—Filed Nov. 28, 1923

Come now the above named plaintiffs in error and show to this court that in this cause, styled on the docket, "Northern Pacific

Railway Company et al., appellants vs. Department of Public Works of Washington et al., respondents" (No. 17689), on the 18th day of July, 1923, there was rendered an opinion and judgment affirming the judgment of the Superior Court of the State of Washington affirming the order of the Department of Public Works of the State of Washington establishing a schedule of rates on logs to be observed by plaintiffs in error, which judgment was and is a final judgment herein.

Subsequently and in due time plaintiffs in error petitioned for a rehearing, and thereafter and on the 20th day of November, 1923, this court denied the said petition for rehearing and thereby said judgment became final and conclusive in this court.

Plaintiffs in error were and are aggrieved by the said judgment and the proceedings had in this cause, in that certain errors were committed to their prejudice, specially pointed out in the assignments of error presented herewith.

That in the record and proceedings in said cause it will appear [fol. 165] that there was drawn in question the validity of an authority exercised under the State of Washington and the laws thereof on the ground of repugnancy to the constitution and laws of the United States, and that the decision was in favor of the validity of said authority.

In this action the Department of Public Works of the State of Washington made a complaint against the reasonableness and lawfulness of the log rates charged and collected by plaintiffs in error for the transportation of logs within this state, and in and by said order the said Department of Public Works prescribed a certain schedule of log rates, and, on writ of review to the Superior Court for Thurston County in this state, plaintiffs in error contended that the said order of the Department of Public Works was in violation of the commerce clause of the constitution of the United States and of sections 13 and 15-A of acts of Congress regulating interstate commerce as amended by the transportation act of February 28, 1920; and further, that the said order prescribed an unreasonably low schedule of rates and required plaintiffs in error and each of them to transport logs at less than a reasonable rate and was confiscatory of the property of the plaintiffs in error and deprived them of their property without due process of law, and denied them the equal protection of the laws, contrary to the Fourteenth Amendment to the Constitution of the United States.

And further, the said order of the Department of Public Works, so affirmed by the Superior Court for Thurston County, ordered a [fol. 166] cancellation of a certain higher schedule of rates filed by plaintiffs in error and claimed by them to be no more than the just and reasonable rates to which they and each of them are entitled to in order that they might earn not less than a fair return on the value of their property devoted to the transportation of logs within this state, and thereby violated the aforesaid provisions of the acts of Congress regulating interstate commerce and the Fourteenth Amendment to the Constitution of the United States.

On appeal to this court from the judgment rendered in said

Superior Court for Thurston County affirming said order of the Department of Public Works plaintiffs in error renewed their contentions aforesaid and specially set up and claimed the benefit and protection of the said provisions of the laws and Constitution of the United States, and the decision of this court sustained the said judgment of the Superior Court for Thurston County and overruled and denied all of the rights, privileges and immunities claimed by plaintiffs in error under and by virtue of the provisions of the laws and Constitution of the United States aforesaid.

Plaintiffs in error state that the judgment and opinion of this court denying said rights claimed under the Constitution and laws of the United States and duly set up and claimed is believed to be erroneous, and the decision so rendered is by the highest court in this state and is final and conclusive so far as the courts of this state are concerned and will so remain, and plaintiffs will be deprived of their rights under the laws and Constitution of the United States unless said judgment is reviewed and corrected by the Supreme Court of the United States in virtue of the writ of error now prayed for.

[fol. 167] Wherefore, plaintiffs in error pray that writ of error may issue to the Supreme Court of the State of Washington for the correcting of the errors complained of; that a supersedeas of the order of the Department of Public Works, making effective said schedule of log rates, be duly allowed upon execution of a bond as prescribed by law, and that a duly authenticated transcript of the record, proceedings and papers herein may be sent to the United States Supreme Court, and for such other order as may be pertinent in the premises.

Geo. T. Reid, C. H. Windus, L. B. da Ponte, Attorneys for Plaintiff in Error Northern Pacific Railway Company. Thomas Balmer, Attorneys for Plaintiff in Error Great Northern Railway Company. F. M. Dudley, Attorneys for Plaintiff in Error Chicago, Milwaukee & St. Paul Railway Company. A. C. Spencer, W. A. Robbins, Attorneys for Plaintiff in Error Oregon-Washington Railroad & Navigation Company. L. B. da Ponte, Attorneys for North Pacific Coast Freight Bureau and S. J. Henry, as Agent.

[fol. 168] IN SUPREME COURT OF WASHINGTON

[Title omitted]

ASSIGNMENTS OF ERROR—Filed Nov. 28, 1923

Come now the plaintiffs in error, Northern Pacific Railway Company, a corporation, Great Northern Railway Company, a corporation, Chicago, Milwaukee & St. Paul Railway Company, a corporation, Oregon-Washington Railroad & Navigation Company, a corporation, North Pacific Coast Freight Bureau and S. J. Henry, as

Agent of said North Pacific Coast Freight Bureau, and in connection with their petition for a writ of error in this cause assign the following errors which plaintiffs in error aver occurred on the trial thereof and upon which they rely to reverse the judgment entered here as appears of record.

I

The Supreme Court of Washington erred in holding and deciding that the burden of proof was on plaintiffs in error to show that the rates and charges applicable to the transportation of logs were not unjust, unreasonable and unjustly discriminatory, and in affirming the order of the Department of Public Works so placing the burden of proof upon the plaintiffs in error, and thereby the prop-
[fol. 169] erty of plaintiffs in error and each of them was taken without due process of law, and they are and each of them is deprived of the equal protection of the laws in violation of the Fourteenth Amendment to the Constitution of the United States.

II

The Supreme Court of the State of Washington erred in refusing to reverse and set aside the order of the Department of Public Works of said state, for the reason that said order placed upon the plaintiffs in error the burden of proof to show that the rates and charges applicable to the transportation of logs were not unjust, unreasonable and unjustly discriminatory, thereby causing an undue and unreasonable advantage, preference and prejudice as between persons and localities in intrastate commerce on the one hand and interstate commerce on the other hand, and undue, unreasonable and unjust discrimination against interstate commerce, contrary to the commerce clause of the Constitution of the United States and contrary to Section 13 of the Interstate Commerce Act as amended by the Transportation Act of 1920.

III.

The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works, for the reason that in and by said order the Department cancelled the schedule of advanced rates applicable to the transportation of logs prescribed by the Interstate Commerce Commission in its decision in Ex Parte 74, 58 I. C. C., page 220, and thereby caused an unjust and unlawful discrimination against interstate commerce and a corresponding preference and advantage to intrastate commerce, in violation of the commerce clause of the Constitution of the United States and of Section 13 of the amended act to regulate interstate commerce, and deprives plaintiffs in error and each of them of a fair return on the value of their [fol. 170] property awarded by the Interstate Commerce Commission pursuant to the provisions of section 15-A of said amended act to regulate commerce.

IV

The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works prescribing a schedule of rates for the transportation of logs in the State of Washington, for the reason that said Department of Public Works incorrectly and inadequately determined the cost of said transportation by using a fundamentally erroneous theory in such determination, and thereby plaintiffs in error and each of them were deprived of just compensation for the transportation service rendered, and the property of each of them *were* denied the equal protection of the law, in violation of the Fourteenth Amendment to the Constitution of the United States.

V

The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works prescribing a schedule of rates for the transportation of logs in said state, for the reason that said Department of Public Works incorrectly and inadequately determined the value of the property of plaintiffs in error and each of them, devoted to said transportation, by adopting and using a fundamentally erroneous theory for the derermination of such valuation, and thereby deprived the plaintiffs in error and each of them of their property without due process of law, and denied them the equal protection of the law, contrary to the Fourteenth Amendment to the Constitution of the United States.

VI

The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works, for the reason that said order inadequately apportioned ad valorem taxes to the prop-
[fol. 171] erty devoted to the transportation of logs and refused to allow anything for federal income taxes, and thereby deprived plaintiffs in error and each of them of a just return on the value of their property, contrary to the Fourteenth Amendment to the Constitution of the United States.

VII

The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works of said state prescribing a schedule of rates for the transportation of logs in the State of Washington, for the reasons:

(a) That the said Department of Public Works in fixing said rates failed and refused to consider the values of the properties of the several plaintiffs in error employed in said transportation.

(b) That said Department of Public Works in fixing said rates failed and refused to consider the several costs to such plaintiffs in error of such transportation.

(c) That said Department of Public Works ordered each and all of the plaintiffs in error to adopt and observe a scehule of log rates in the State of Washington which is concededly not based upon the separate valuation or cost of operation of any of the corporate plaintiffs in error, but upon the assumed aggregate valuation and the assumed average cost of operation of all the corporate plaintiffs in error.

Thereby each of said plaintiffs in error is deprived of its property without due process of law and denied the equal protection of the law, in violation of the Fourteenth Amendment to the Constitution of the United States.

VIII

The Supreme Court of the State of Washington erred in refusing to reverse and set aside the order of the Department of Public Works [fol. 172] fixing said schedule of log rates in the State of Washington, for the reason that said Department of Public Works ignored the evidence as to the value of the property and cost of operation of each of plaintiffs in error at the places and upon the lines where the log service is performed by it, but based its order establishing said schedule of rates upon findings as to the assumed average cost of operation upon the combined systems of said corporate plaintiffs in error and as to the assumed combined valuation of the property of the corporate plaintiffs in error in the entire State of Washington.

IX

The Supreme Court of Washington erred in affirming the order of the Department of Public Works, for the reason that the said order prescribes a schedule of log rates which does not pay the cost of the traffic to which it applies plus a fair return on the value of the property devoted thereto, and thereby the property of plaintiffs in error and each of them is taken without due process of law and they are deprived of the equal protection of the law.

X

The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works, for the reason that the said order is based upon findings of fact which are not supported by any evidence contained in the record of this case.

XI

The Supreme Court erred in affirming the order of the Department of Public Works which cancelled Tariff No. 29 prescribing a schedule of advanced log rates no higher than plaintiffs in error and each of them are entitled to for the transportation of logs, and thereby plaintiffs in error and each of them are deprived of their property [fols. 173 & 174] without due process of law and denied the equal

protection of the law, in violation of the Fourteenth Amendment to the Constitution of the United States.

XII

The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works of the State of Washington in establishing a rate for the transportation of logs in said state, for the reason that said rate was established as an experimental rate only for the purpose of determining whether such rate would or would not be sufficient, and thereby the corporate plaintiffs in error and each of them were denied the equal protection of the law and deprived of their property without due process of law, in violation of the Fourteenth Amendment to the Constitution of the United States.

XIII

The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works as it peculiarly affects plaintiff in error, Oregon-Washington Railroad & Navigation Company, for the reason that the Department refused to consider or allow anything for the amortization of the investment of said company in what is known as its North River Branch in this state, and thereby said company was deprived of its property without due process of law and denied the equal protection of the law, in violation of the Fourteenth Amendment to the Constitution of the United States.

Geo. T. Reid, C. H. Windus, L. B. da Ponte, Attorneys for Plaintiff in Error Northern Pacific Railway Company. Thomas Balmer, Attorneys for Plaintiff in Error Great Northern Railway Company. F. M. Dudley, Attorneys for Plaintiff in Error Chicago, Milwaukee & St. Paul Ry. Co.

[fol. 175] IN SUPREME COURT OF WASHINGTON

[Title omitted]

ORDER ALLOWING WRIT OF ERROR—Filed Nov. 28, 1923

On this the 28th day of November, A. D. 1923, came on to be heard the application of the above named plaintiffs in error, said plaintiffs being represented by counsel, for a writ of error, and it appearing to the court from the petition filed herein and the record filed therewith that the application ought to be granted, and that a transcript of the record and proceedings and papers upon which the judgment of the Supreme Court of the State of Washington was rendered, properly certified should be sent to the Supreme Court of the United States, as prayed for in said petition, that such proceedings may be had as will be just in the premises;

It is therefore ordered that the writ of error be allowed upon the respective plaintiffs in error giving bond in the amounts hereinafter stated and conditioned as hereinafter provided, which bonds shall operate as a supersedeas and suspend the judgment of the Supreme [fol. 176] Court of the State of Washington affirming the order of the Department of Public Works pending the determination of said cause by the Supreme Court of the United States.

This order is conditioned upon the filing by plaintiffs in error of bonds in the following sums, to-wit:

Northern Pacific Railway Company	$209,000
Great Northern Railway Company	139,000
Chicago, Milwaukee & St. Paul Railway Company	254,000
Oregon-Washington Railroad & Navigation Company	50,560
North Pacific Coast Freight Bureau and S. J. Henry, as Agent of North Pacific Coast Freight Bureau	1,000

each of which bonds shall be conditioned that the plaintiffs in error shall prosecute their writ of error to effect and answer all damages and costs if they fail to make their plea good, and in the case of each of the four common carriers, plaintiffs in error, shall be further conditioned that if the said judgment of the Supreme Court of the State of Washington be affirmed by the Supreme Court of the United States, the plaintiff in error giving such bond shall repay and return to shippers and consignees in respect to log shipments hereafter made and affected by said judgment, any charges which shall have been exacted by it in excess of the rates in said judgment adjudged to be lawfully in force.

It is further ordered that a true copy of the record, assignments of error and all proceedings had in this cause in the Supreme Court of the State of Washington shall be transmitted to the Supreme Court of the United States, properly certified as the law directs, that the said Court may inspect the same and do what according to [fol. 177] law should be done.

In testimony whereof, witness my hand this 28th day of November, A. D. 1923.

John F. Main, Chief Justice of the Supreme Court of the State of Washington.

[fol. 178 & 179] Bond on Writ of Error for $234,000—Approved and filed Nov. 28, 1923; omitted in printing

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[fols. 180 & 181] Bond on Writ of Error for $139,000—Approved and filed Nov. 28, 1923; omitted in printing

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[fols. 182 & 183] Bond on Writ of Error for $209,000—Approved and filed Nov. 28, 1923; omitted in printing

[fols. 184-186] BOND ON WRIT OF ERROR FOR $50,560—Approved and filed Nov. 28, 1923; omitted in printing

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[fols. 187 & 188] BOND ON WRIT OF ERROR FOR $1,000—Approved and filed Nov. 28, 1923; omitted in printing

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[fol. 189] [File endorsement omitted]

IN SUPREME COURT OF WASHINGTON

WRIT OF ERROR—Filed Nov. 28, 1923

The President of the United States to the Honorable Judges of the Supreme Court of the State of Washington, Greeting:

Because in the record and proceedings, as also in the rendition of the judgment in a cause in said Supreme Court of the State of Washington before you, being the highest court of law or equity of said state in which a decision could be had in a suit between Northern Pacific Railway Company, Great Northern Railway Company, Chicago, Milwaukee & St. Paul Railway Company, Oregon-Washington Railroad & Navigation Company, North Pacific Coast Freight Bureau, and S. J. Henry, as Agent of North Pacific Coast Freight Bureau, Appellants, v. Department of Public Works of Washington, E. V. Kuykendall, Director of Public Works, Hance H. Cleland, Supervisor of Public Utilities, and Frank R. Spinning, Supervisor of Transportation, members of said Department of Public Works, Respondents, being Cause Number 17689 of the Supreme Court of the State of Washington, there was drawn in question the validity of an order made and authority exercised by said respondents under the State of Washington and the laws of said state, on the ground of their being repugnant to the constitution and laws of the United States, and the decision was in favor of their validity; and there being manifest error in said decision, greatly to the damage of the above named plaintiffs in error, the appellants in said cause in the Supreme Court of the State of Washington; and we being willing that if there is error it should be duly corrected;

[fol. 190] We do therefore command you, if judgment be therein given, that under the seal of your court you send the record and proceedings had in said cause to the Supreme Court of the United States, together with this writ, so that you have the same at Washington on the 27th day of January, A. D. 1924, in the Supreme Court to be then and there held, that the record may be inspected by said Court and justice done.

Witness, the Honorable William Howard Taft, Chief Justice of the Supreme Court of the United States, this 28th day of November, A. D. 1923.

F. M. Harshberger, Clerk U. S. District Court for the Western District of Washington, by Alice Hugues, Deputy.

Allowed by John F. Main, Chief Justice of the Supreme Court of the State of Washington.

[fols. 191 & 192] CITATION—In usual form, showing service on John H. Dunbar; omitted in printing

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[fol. 192a] IN SUPREME COURT OF WASHINGTON

[Title omitted]

CLERK'S CERTIFICATE

I, C. S. Reinhart, Clerk of the Supreme Court of the State of Washington, hereby certify that the above and foregoing, together with the six volumes accompanying the same comprising in all seven volumes, of which the within is vol. 2, pages 193 to 516 are a full, true and correct transcript of the record in the above-entitled cause, and that in pursuance of the writ of error heretofore received I now transmit the same together with the original writ of error and the original citation which is contained in Vol. 1 hereof.

In testimony whereof, I have hereunto set my hand and affixed the Seal of said Court, this 16th day of April, 1924.

C. S. Reinhart, Clerk of the Supreme Court of the State of Washington. [Seal of the Supreme Court, State of Washington.]

(Here follow Department's Exhibits A, C, and D, marked side folio pages 193-195-3, inc.)

Departments Exhibit A.

Cause Number 5159

THE DEPARTMENT OF PUBLIC WORKS
(DIVISION OF TRANSPORTATION)

Log Rates and Minimums

Statement showing present commodity and distance rates and minimum on logs, in carloads and trainloads, and those in effect prior to August 26, 1920, between points within the State of Washington on lines of the N. P. Ry. Co., G. N. Ry. Co., C., M. & St. P. Ry. Co., and O.-W. R. & N. Co., together with the mileage between those points where specific rates are provided. Also showing rates and minimums in Idaho and Oregon on same roads, and interstate rates *between* points in Washington *and* points in Idaho and Oregon.

O. O. Calderhead, Traffic Expert.

Olympia, Washington.
April 11, 1921.

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N. P. LOG RATES, WESTERN WASHINGTON, TARIFF 398-L

(Does not apply on hardwood logs)

ITEM	FROM	TO	Miles	Rate Effective Aug. 26, 1929	Rate Prior to Aug. 26, 1929	Minimum Feet Per Car	REMARKS
30	Star Timber Co.	Globe	2	$1.56½	$1.25	$7.50 per car	Single car rates.
282	Forcamp	Nagrom	3	1.56½	1.25	7,000 ft.	Single car rates.
291	Nagrom	Eagle Gorge	9	1.62½	1.30	7,000 ft.	Single car rates.
75	Weatherwax	Aberdeen	10	.94	.75	7,000 ft.	Single car rates.
20	Mendota	Centralia	11	1.62½	1.30	7,000 ft.	Single car rates.
75	Weatherwax	Hoquiam	14	1.56½	1.25	7,000 ft.	Single car rates.
106	Gibson Creek	Bordeaux Junction	16	1.56½	1.25	7,000 ft.	Single car rates.
292	Nagrom	Selleck	19	2.25	1.80	7,000 ft.	Single car rates.
293	Buckley	Eagle Gorge	20	2.11½	1.69	7,000 ft.	Single car rates.
294	Covington	Eagle Gorge	20	2.11½	1.69	7,000 ft.	Single car rates.
Tff. 2813E	Puyallup River	Tacoma	25	1.72	1.37½	6,000 ft.	Single car rates.
Tff. 2813E	Buckley	Tacoma	29	1.72	1.37½	6,000 ft.	Single car rates.
106	Gibson Creek	Olympia	29	1.95½	1.56½	7,000 ft.	Single car rates.
289	Auburn	Eagle Gorge	29	2.27	1.81½	7,000 ft	Single car rates.
294	Crocker	Eagle Gorge	30	2.27	1.81½	7,000 ft.	Single car rates.
104	Packwood	Union Mill Co.	32	2.19	1.75	7,000 ft.	Single car rates.
282	Forcamp	Norco	50	2.65½	2.12½	7,000 ft.	Single car rates.
291	Nagrom	Tacoma	55	2.62½	2.10	7,000 ft.	Single car rates.
291	Nagrom	Seattle	59	2.75	2.20	7,000 ft.	Single car rates.
200	Clear Lake	Big Lake	6	1.25	1.00	$7.50 per car	Trainloads of 10 or more cars.
25	Nallpee	Raymond	12	1.56½	1.25	7,000 ft.	Trainloads of 10 or more cars.
35	Lebam	McCormick	14	1.56½	1.25	7,000 ft.	Trainloads of 10 or more cars.
25	Lebam	Raymond	15	1.56½	1.25	7,000 ft.	Trainloads of 10 or more cars.
220	Slaman	Bellingham	18	1.80	1.44	7,000 ft.	Trainloads of 10 or more cars.
70B	Mack	South Aberdeen	18	1.56½	1.25	7,000 ft.	Trainloads of 10 or more cars.
70B	Mack	Aberdeen	19	1.56½	1.25	7,000 ft.	Trainloads of 10 or more cars.
70B	Mack	Cosmopolis	19	1.56½	1.25	7,000 ft.	Trainloads of 10 or more cars.
100A	Carlisle	Hoquiam	19	1.56½	1.25	7,000 ft.	Trainloads of 10 or more cars.
35	Lebam	Doty	21	1.87½	1.50	7,000 ft.	Trainloads of 10 or more cars.
70B	Mack	Hoquiam	22	1.56½	1.25	7,000 ft.	Trainloads of 10 or more cars.
225	Morgood	Bellingham	22	1.87½	1.50	7,000 ft.	Trainloads of 10 or more cars.
45	Custer	South Bend	23	1.72	1.37½	7,000 ft.	Trainloads of 10 or more cars.
165	Hazel	McMurray	28	1.64½	1.31½	7,000 ft.	Trainloads of 10 or more cars.
165	Wickersham	McMurray	28	1.64½	1.31½	7,000 ft.	Trainloads of 10 or more cars.
Tff. 2813E	Puyallup River	Tacoma	25	1.56½	1.25	6,000 ft.	Trainloads of 10 or more cars.
Tff. 2813E	Buckley	Tacoma	29	1.56½	1.25	6,000 ft.	Trainloads of 10 or more cars.
225	Delvan	Bellingham	30	1.87½	1.50	7,000 ft.	Trainloads of 10 or more cars.
225	Coyne	Bellingham	30	2.11½	1.69	7,000 ft.	Trainloads of 10 or more cars.
65	Lytle	Hoquiam	32	1.95½	1.56½	7,000 ft.	Trainloads of 10 or more cars.
170	Hazel	Big Lake	35	1.95½	1.56½	7,000 ft.	Trainloads of 10 or more cars.
140	Weise	McMurray	36	1.87½	1.50	7,000 ft.	Trainloads of 10 or more cars.
175	Darrington	McMurray	39	1.95½	1.56½	7,000 ft.	Trainloads of 10 or more cars.
250A	Fairfax	Tacoma	40	1.95½	1.56½	7,000 ft.	Trainloads of 10 or more cars.
130	Holo	Everett	40	1.95½	1.56½	7,000 ft.	Trainloads of 10 or more cars.
130	McMurray	Everett	40	1.95½	1.56½	7,000 ft.	Trainloads of 10 or more cars.
135	Weise	Hartford	40	2.03	1.62½	7,000 ft.	Trainloads of 10 or more cars.
290	Helmar	Puyallup	44	2.34½	1.87½	7,000 ft.	Trainloads of 10 or more cars.
285	Eagle Gorge	Tacoma	46	2.34½	1.87½	7,000 ft.	Trainloads of 10 or more cars.
285	Baldi	Tacoma	47	2.34½	1.87½	7,000 ft.	Trainloads of 10 or more cars.
145A	Hazel	Everett	47	1.95½	1.56½	7,000 ft.	Trainloads of 10 or more cars.

N. P. LOG RATES, WESTERN WASHINGTON, TARIFF 398-L

ITEM	FROM	TO	Miles	Rate Effective Aug. 26, 1920	Rate Prior to Aug. 26, 1920	Minimum Feet Per Car	REMARKS
280	Kerriston	Norco	51	2.34½	1.87½	6,000 ft.	Trainloads of 10 or more cars.
145A	Gebbot	Everett	55	2.03	1.62½	7,000 ft.	Trainloads of 10 or more cars.
135	Weise	Everett	56	2.03	1,62½	7,000 ft.	Trainloads of 10 or more cars.
60A	Bunker	Aberdeen	66	2.58	2.06½	7,000 ft.	Trainloads of 10 or more cars.
60A	Bunker	Hoquiam	69	2.58	2.06½	7,000 ft.	Trainloads of 10 or more cars.
185A	Gebbot	Fremont	80	2.74	2.19	7,000 ft.	Trainloads of 10 or more cars.
180	Darrington	Seattle	90	2.81½	2.25	7,000 ft.	Trainloads of 10 or more cars.
40	Lebam	Aberdeen	97	2.97	2.37½	7,000 ft.	Trainloads of 10 or more cars.
40	Nalpee	Hoquiam	103	2.97	2.37½	7,000 ft.	Trainloads of 10 or more cars.
110	Bordeaux Junction	Olympia	13	1.40½	1.12½	7,000 ft.	Trainloads of 15 or more cars.
235A	Wickersham	Bellingham	20	1.56½	1.25	7,000 ft.	Trainloads of 15 or more cars.
5	Yacolt	Felida	30	1.56½	1.25	6,000 ft.	Trainloads of 15 or more cars.
210	Delvan	Larson	26	1.56½	1.25	7,000 ft.	Trainloads of 20 or more cars.
210	Delvan	Bellingham	30	1.56½	1.25	7,000 ft.	Trainloads of 20 or more cars.
125	Oso	Everett	42	1.56½	1.25	7,000 ft.	Trainloads of 20 or more cars.
125	Darrington	Everett	58	1.95½	1.56½	7,000 ft.	Trainloads of 20 or more cars.
160A	Lockley	Everett	18½	1.72	1.37½	7,000 ft.	Trainloads of 10 or more cars via H. E., Hartford, & N. P.

Distance scale applying between all main and branch line stations in Washington, west of and including Palmer Junction, except that it does not apply on shipments which involve handling through Ostrander Tunnel located between Ostrander and Kelso, or over Lewis River draw bridge between Woodland and Ridgefield.

Distance	Rate Effective Aug. 26, 1920	Rate Prior to Aug. 26, 1920	
10 miles or less	$1.56½	$1.25	Minimum 7000 feet per car.
Over 10 miles, not over 15 miles	1.95½	1.56½	Minimum 7000 feet per car.
Over 15 miles, not over 20 miles	2.11½	1.69	Minimum 7000 feet per car.
Over 20 miles, not over 25 miles	2.19	1.75	Minimum 7000 feet per car.
Over 25 miles, not over 30 miles	2.27	1.81½	Minimum 7000 feet per car.
Over 30 miles, not over 35 miles	2.34½	1.87½	Minimum 7000 feet per car.
Over 35 miles, not over 40 miles	2.42½	1.94	Minimum 7000 feet per car.
Over 40 miles, not over 45 miles	2.50	2.00	Minimum 7000 feet per car.
Over 45 miles, not over 50 miles	2.58	2.06½	Minimum 7000 feet per car.
Over 50 miles, not over 55 miles	2.65½	2.12½	Minimum 7000 feet per car.
Over 55 miles, not over 60 miles	2.74	2.19	Minimum 7000 feet per car.
Over 60 miles, not over 65 miles	2.81½	2.25	Minimum 7000 feet per car.
Over 65 miles, not over 70 miles	2.89½	2.31½	Minimum 7000 feet per car.
Over 70 miles, not over 75 miles	2.97	2.37½	Minimum 7000 feet per car.
Over 75 miles, not over 80 miles	3.05	2.44	Minimum 7000 feet per car.
Over 80 miles, not over 85 miles	3.12½	2.50	Minimum 7000 feet per car.
Over 85 miles, not over 90 miles	3.20½	2.56½	Minimum 7000 feet per car.
Over 90 miles, not over 95 miles	3.28	2.62½	Minimum 7000 feet per car.
Over 95 miles, not over 100 miles	3.28	2.62½	Minimum 7000 feet per car.
Over 100 miles, not over 110 miles	3.36½	2.69	Minimum 7000 feet per car.
Over 110 miles, not over 120 miles	3.44	2.75	Minimum 7000 feet per car.
Over 120 miles, not over 130 miles	3.52	2.81½	Minimum 7000 feet per car.
Over 130 miles, not over 140 miles	3.59½	2.87½	Minimum 7000 feet per car.
Over 140 miles, not over 150 miles	3.67½	2.94	Minimum 7000 feet per car.

N. P. LOG RATES, EASTERN WASHINGTON, TARIFF 398-L

ITEM	FROM	TO	Miles	Rate Effective Aug. 26, 1920	Rate Prior to Aug. 26, 1920	Minimum Feet Per Car	REMARKS
300	Thorp	Ellensburg	8	$1.56½	$1.25	7000 ft.	Single car rates.
295	Easton	Cle Elum	13	1.95½	1.56½	7000 ft.	Single car rates.
300	Bristol	Ellensburg	17	2.11½	1.69	7000 ft.	Single car rates.
300	Casway	Ellensburg	19	2.11½	1.69	7000 ft.	Single car rates.
300	Younger	Ellensburg	22	2.19	1.75	7000 ft.	Single car rates.
300	Easton	Ellensburg	38	2.42½	1.94	7000 ft.	Single car rates.
305	Teanaway	Yakima	58	3.12½	2.50	7000 ft.	Single car rates.
305	Younger	Yakima	59	3.12½	2.50	7000 ft.	Single car rates.
305	Easton	Yakima	75	3.52	2.81½	7000 ft.	Single car rates.
305	Hubner	Yakima	78	3.90½	3.12½	7000 ft.	Single car rates.
310	Teanaway	Yakima	58	2.74	2.19	7000 ft.	Trainloads of 10 or more cars.
310	Younger	Yakima	59	2.74	2.19	7000 ft.	Trainloads of 10 or more cars.
310	Easton	Yakima	75	3.12½	2.50	7000 ft.	Trainloads of 10 or more cars.
310	Hubner	Yakima	78	3.52	2.81½	7000 ft.	Trainloads of 10 or more cars.
315	Casway	Yakima	56	2.34½	1.87½	7000 ft.	Trainloads of 20 or more cars.

G. N. LOG RATES, WESTERN WASHINGTON
(Does not apply on hardwood logs)

TARIFF	FROM	TO	Miles	Rate Effective Aug. 26, 1930	Rate Prior to Aug. 26, 1930	Minimum Feet Per Car
1515B	Stephens Spur	Snohomish	10	$1.33	$1.06½	6000 ft.
1518B	Birdview (spur 2 miles east)	Minkler	13	1.95½	1.56½	7000 ft.
484F	Skagit River Spur (1 mile east Hamilton)	Sedro Woolley	13	1.56½	1.25	6000 ft.
1607A	Hamilton	Mount Vernon	20	2.50	2.00	7000 ft.
1514D	Sauk (spur 2½ miles west)	Lyman	20	2.25	1.80	7000 ft.
1155D	Sultan Junction	Everett	20	2.03	1.62½	7000 ft.
1514D	Sauk (spur 2½ miles west)	Minkler	22	2.25	1.80	7000 ft.
1474B	Sultan	Everett	22	2.19	1.75	7000 ft.
1514D	Van Horn	Sedro Woolley	25	2.25	1.80	7000 ft.
1514D	Sauk (spur 2½ miles west)	Sedro Woolley	28	2.37½	1.90	7000 ft.
1516B	Gold Bar (spur 2½ miles east)	Everett	30	2.27	1.81½	7000 ft.
1607A	Concrete	Mount Vernon	32	2.50	2.00	7000 ft.
546E	Index	Everett	37	3.12½	2.50	6000 ft.
684H	Concrete	Anacortes	45	2.50	2.00	7000 ft.
1514D	Sauk (spur 2½ miles west)	Anacortes	50	2.87½	2.30	7000 ft.
684H	Concrete	Birdsview	6	.02 cwt.	.01½ cwt.	60,000 lbs.
684H	Concrete	Burlington	28	.02½ cwt.	.02 cwt.	60,000 lbs.
684H	Concrete	South Bellingham	49	.03 cwt.	.02½ cwt.	60,000 lbs.
164G	Skagit River Spur (1 mile east Hamilton)	Log Rollway (1½ m. East Anacortes)	33	.02½ cwt.	.02 cwt.	50,000 lbs.*

* In absence of track scale weight the log scale will be used on basis of 10,000 lbs. for 1000 feet.

G. N. LOG RATES, EASTERN WASHINGTON
(Applies on all logs, except as noted.)

TARIFF	FROM	TO	Miles	Rate Effective Aug. 26, 1930	Rate Prior to Aug. 26, 1930	Minimum Feet Per Car	REMARKS
1049F	Clayton	Deer Park	5	$1.56½	$1.25	7000 ft.	
1049F	New Boundary	Hanley's Spur	7	1.56½	1.25	7000 ft.	
871E	Velvet	Hanley's Spur	9	1.80	1.44	8000 ft.	Not including hardwood logs.
1509B	Goodhue Spur	Elk	15	1.95½	1.56½	7000 ft.	
527G	Springdale	Deer Park	20	1.72	1.37½	7000 ft.	Not including hardwood logs.
1181D	Bossburg	Arden	29	3.52	2.81½	7000 ft.	
1181D	Williams	Arden	34	3.52	2.81½	7000 ft.	
1049F	Blue Creek	Deer Park	44	2.50	2.00	7000 ft.	
1242C	Cline	Spokane	48	3.12½	2.50	6000 ft.	
1181D	Stone's Spur	Arden	51	3.75	3.00	7000 ft.	
1181D	Poole's Spur	Arden	52	3.75	3.00	7000 ft.	
1181D	Condon's Spur	Arden	54	3.75	3.00	7000 ft.	
1181D	Wood Spur	Arden	54	3.75	3.00	7000 ft.	
1181D	Velvet	Arden	56	3.75	3.00	7000 ft.	
1524B	Valley	Spokane	57	3.75	3.00	6000 ft.	Not including hardwood logs.
1181D	Boundary	Arden	58	3.75	3.00	7000 ft.	
1540B	Palmer's Siding	Deer Park	64	3.12½	2.50	7000 ft.	Not including hardwood logs.
1049F	Barstow	Deer Park	85	3.90½	3.12½	7000 ft.	
1049F	Laurier	Deer Park	102	4.06½	3.25	7000 ft.	
968E	Velvet	Deer Park	110	4.06½	3.25	7000 ft.	
1622A	Orient	Spokane	118	4.69	3.75	7000 ft.	Not including hardwood logs.
905F	Boundary	Deer Park	132	4.06½	3.25	7000 ft.	
1622A	Velvet	Spokane	138	4.87½	3.90	7000 ft.	Not including hardwood logs.
1244A	Pollard	Karamin	3	.02 cwt.	.01½ cwt.	60,000 lbs.*	
1244A	Malo	Karamin	4	.02 cwt.	.01½ cwt.	60,000 lbs.*	
1244A	Forbay	Karamin	6	.02 cwt.	.01½ cwt.	60,000 lbs.*	
1244A	Curlew	Karamin	10	.02 cwt.	.01½ cwt.	60,000 lbs.*	
1244A	Republic	Karamin	11	.02½ cwt.	.02 cwt.	60,000 lbs.*	
1244A	Paxson	Karamin	16	.02½ cwt.	.02 cwt.	60,000 lbs.*	
1244A	Toroda	Karamin	20	.02½ cwt.	.02 cwt.	60,000 lbs.*	
1610A	Penrith	Spokane	43	3.12½	2.50	7000 ft.	Not including hardwood logs.
1609A	Dulwich	Blue Creek	46	3.12½	2.50	7000 ft.	Not including hardwood logs.
1611A	Curlew	Arden	72	3.75	3.00	7000 ft.	Not including hardwood logs.
1611A	Malo	Arden	78	4.37½	3.50	7000 ft.	Not including hardwood logs.
1708A	Chiwaukum (spur 1 mile east)	Leavenworth	10	1.87½	None	7000 ft.	Not including hardwood logs.

* In absence of track scale weight the surveyors' log scale will govern on basis of 10,000 lbs. per 1000 feet.

C., M. & ST. P. LOG RATES, WESTERN WASHINGTON, TARIFF 13825-A

(Applies on logs other than hardwood, except as noted)

(Single car rates)

ITEM	FROM	TO	Miles	Rate Effective Aug. 26, 1930	Rate Prior to Aug. 26, 1930	Minimum Feet Per Car	REMARKS
135	Cedar Falls	Selleck	6	$1.25	$1.00	7000 ft.	
145	High Rock	Duvall	6	1.56½	1.25†	6000 ft.	
170	Snohomish	Everett	7	1.95½	1.56½†	7000 ft.	
38	Burt	Doty	11	1.64½	1.31½	7000 ft.	
40A	P. & E. Junction	Raymond	11	1.72	1.37½	7000 ft.	Minimum 6000 ft. on P.S. & W.H. log cars.
25	Bordeaux Spur	Gregory	11	1.56½	1.25†	7000 ft.	
75	Berkeley	Tacoma	13	1.87½	1.50‡	6000 ft.	
123	Maple Falls	Sumas	14	1.95½	1.56½	7000 ft.	
80	Kirby	Tacoma (C., M. & St. P. log dump)	14	1.72	1.37½*	5000 ft.	
85	Kirby	Tacoma (S. P. & T. L. Co. dump)	14	1.56½	1.25†	5000 ft.	
170	Monroe	Everett	14	1.95½	1.56½†	7000 ft.	
75	Haskins	Tacoma	16	2.03	1.62 1/3‡	6000 ft.	
40A	Burt	Raymond	17	1.72	1.37½	7000 ft.	Minimum 6000 ft. on P.S. & W.H. log cars.
170	Highrock	Everett	18	1.95½	1.56½†	7000 ft.	
40A	Davis	Raymond	19	1.87½	1.50	7000 ft.	Minimum 6000 ft. on P.S. & W. H. log cars.
75	Tanwax Junction	Tacoma	21	2.19	1.75‡	6000 ft.	
75	Betchards	Tacoma	22	2.19	1.75‡	6000 ft.	
75	Kapowsin	Tacoma	23	2.19	1.75‡	6000 ft.	
80	Tidewater	Tacoma (C., M. & St. P. log dump)	23	1.72	1.37½*	5000 ft.	
85	Tidewater	Tacoma (St. P. & T. L. Co. dump)	23	1.56½	1.25†	5000 ft.	
75	Tidewater	Tacoma	23	2.19	1.75‡	6000 ft.	
170	Duvall	Everett	24	1.95½	1.56½†	7000 ft.	
75	Electron	Tacoma	25	2.34½	1.87½‡	6000 ft.	
80	Electron	Tacoma (C.M. & St.P. log dump)	25	1.72	1.37½*	5000 ft.	
85	Electron	Tacoma (St. P. & T. L. Co. dump)	25	1.56½	1.25†	5000 ft.	
80	Holtz	Tacoma (C.M. & St.P. log dump)	26	1.72	1.37½*	5000 ft.	
85	Holtz	Tacoma (St. P. & T. L. Co. dump)	26	1.56½	1.25†	5000 ft.	
75	McKenna	Tacoma	27	2.34½	1.87½‡	6000 ft.	
75	Clay City	Tacoma	28	2.34½	1.87½‡	6000 ft.	
80	Skewis	Tacoma (C.M. & St.P. log dump)	28	2.03	1.62½*	5000 ft	
85	Skewis	Tacoma (St. P. & T.L. Co. dump)	28	1.87½	1.50†	5000 ft.	
170	Stillwater	Everett	29	1.95½	1.56½†	7000 ft.	
75	Eatonville	Tacoma	33	2.50	2.00‡	6000 ft.	
80	Eatonville	Tacoma (C.M. & St.P. log dump)	33	2.03	1.62½*	5000 ft.	
85	Eatonville	Tacoma (St. P. & T.L. Co. dump)	33	1.87½	1.59†	5000 ft.	
170	Carnation	Everett	33	2.11½	1.69†	7000 ft.	
30	Tanwax Junction	Gregory	38	2.42½	1.94†	6500 ft.	
125	Cedar Falls	Seattle	39	2.42½	1.94†	7000 ft.	
75	Reliance	Tacoma	43	2.65½	2.12½‡	6000 ft.	
75	Elbe	Tacoma	47	2.81½	2.25‡	6000 ft.	
60	Maytown	Kapowsin	49	2.65½	2.12½	7000 ft.	
75	Camp 12 Spur	Tacoma	50	2.81½	2.25‡	6000 ft.	
75	National	Tacoma	53	2.81½	2.25‡	6000 ft.	
75	Mineral	Tacoma	54	2.97	2.37½‡	6000 ft.	
75	Ashford	Tacoma	55	2.97	2.37½‡	6000 ft.	
125	Cedar Falls	Everett	55	2.65½	2.12½†	7000 ft.	
75	Ladd	Tacoma	57	2.97	2.37½‡	6000 ft.	
125	Cedar Falls	Tacoma	58	2.74	2.19†	7000 ft.	
75	Morton	Tacoma	68	3.12½	2.50‡	6000 ft.	

For explanation of reference marks see page 7.

C., M. & ST. P. LOG RATES, WESTERN WASHINGTON, TARIFF 13825-A

(Applies on logs other than hardwood, except as noted)

ITEM	FROM	TO	Miles	Rate Effective Aug. 26, 1939	Rate Prior to Aug. 26, 1939	Minimum Feet Per Car	REMARKS
35	Lindberg	Gregory	83	$3.12½	$2.50	7000 ft.‖	
45	Ashford	Raymond	147	3.75	3.00	7000 ft.‖	Cottonwood logs only.
45	Morton	Raymond	159	3.75	3.00	7000 ft.‖	Cottonwood logs only.
175	Snohomish	Everett	7	1.56½	1.25†	7000 ft.	Trainloads of 10 or more cars.
175	Monroe	Everett	14	1.56½	1.25†	7000 ft.	Trainloads of 10 or more cars.
175	Highrock	Everett	18	1.56½	1.25†	7000 ft.	Trainloads of 10 or more cars.
175	Duvall	Everett	24	1.56½	1.25†	7000 ft.	Trainloads of 10 or more cars.
175	Stillwater	Everett	29	1.56½	1.25†	7000 ft.	Trainloads of 10 or more cars.
175	Carnation	Everett	33	1.72	1.37½†	7000 ft.	Trainloads of 10 or more cars.
55	Gregory	Kapowsin	40	2.42½	1.94†	7000 ft.	Trainloads of 10 or more cars.
100	Reliance	Tacoma	43	2.43½	1.87½*	6000 ft.§	Trainloads of 10 or more cars.
50	Saginaw	McKenna	51	2.19	1.75	7000 ft.	Trainloads of 10 or more cars.
155	Bandera	Everett	69	2.42½	1.94†	7000 ft.	Trainloads of 10 or more cars.
105	Welcome Siding	Bellingham	22	1.64½	1.31½†	7000 ft.	Trainloads of 15 or more cars.
105	Kulshan	Bellingham	23	1.64½	1.31½†	7000 ft.	Trainloads of 15 or more cars.
10	Cedarville	Preachers Slough	25	1.56½	1.25†	7000 ft.	Trainloads of 15 or more cars.
20	Wilson's Spur	Preachers Slough	33	1.87½	1.50	7000 ft.	Trainloads of 15 or more cars.
20	Helsing Junction	Preachers Slough	35	1.87½	1.50	7000 ft.	Trainloads of 15 or more cars.
10	Cedarville	Hoquiam	35	1.64½	1.31½†	7000 ft.	Trainloads of 15 or more cars.
95	Ashford	Tacoma	55	2.50	2.00‡	6000 ft.§	Trainloads of 15 or more cars.
90	Westfork	Tacoma	63	2.65½	2.12½‡	6000 ft.§	Trainloads of 15 or more cars.
90	Morton	Tacoma	68	2.65½	2.12½‡	6000 ft.§	Trainloads of 15 or more cars.
165	Highrock	Everett	18	1.40½	1.12½†	7000 ft.	Trainloads of 20 or more cars.
180	Stillwater	Snohomish	22	1.56½	1.25†	6000 ft.	Trainloads of 20 or more cars.
180	Stillwater	Everett	29	1.56½	1.25†	6000 ft.	Trainloads of 20 or more cars.
160	Cedar Falls	Everett	55	2.11½	1.69†	6500 ft.	Trainloads of 20 or more cars.
150	Snohomish Falls Lumber Spur	Riverview	39	1.87½	1.50†	7000 ft.	Trainloads of 30 or more cars.
150	Snohomish Falls Lumber Spur	Everett	43	1.95½	1.56½†	7000 ft.	Trainloads of 30 or more cars.

† Applies on logs all kinds.
‡ Applies to C., M. & St. P. log dump or St. Paul & Tac. Lbr. Co. log dump, and includes use of C., M. & St. P. log dump at Tacoma.
* Includes use of C., M. & St. P. log dump at Tacoma.
‖ Single car rates.
§ Minimum 7000 ft. on cars with extension stakes.

C., M. & ST. P. LOG RATES, EASTERN WASHINGTON & IDAHO, TARIFF 13825-A
(Applies on logs all kinds, except as noted)

ITEM	FROM	TO	Miles	Rate Effective Aug. 26, 1930	Rate Prior to Aug. 26, 1930	Minimum Feet Per Car	REMARKS
260	Sherwin, Idaho	Fernwood, Idaho	18	$1.56½	$1.25	7000 ft.	Single car rates.
240	Santa, Idaho	St. Maries, Idaho	23	1.95½	1.56½	7000 ft.	Single car rates.
275	Plummer, Idaho	St. Joe, Idaho	32	2.19	1.75	6000 ft.*	Single car rates.
280	Sorrento, Idaho	St. Joe, Idaho	36	2.19	1.75	7000 ft.	Single car rates.
280	Worley, Idaho	St. Joe, Idaho	37	2.19	1.75	7000 ft.	Single car rates.
185	Plummer, Idaho	Spokane, Wash.	42	1.95½	1.56½	8000 ft.	Single car rates.
187	Reasor, Idaho	Spokane, Wash.	43	1.95½	1.56½	8000 ft.	Single car rates.
285	Clarkia, Idaho	St. Joe, Idaho	49	2.34½	1.87½	6000 ft.*	Single car rates.
205	Fernwood, Idaho	Coeur d'Alene, Idaho	107	3.36½	2.69	7000 ft.	Single car rates.
190	Metaline Falls, Wash.	Spokane, Wash.	127	3.52	2.81½	8000 ft.	Single car rates.
195	Blueslide, Wash.	Ione, Wash.	14	1.87½	1.50	8000 ft.	Trainloads of 10 or more cars.
255	Calder, Idaho	St. Maries, Idaho	23	1.56½	1.25	6000 ft.*	Trainloads of 10 or more cars.
220	Sorrento, Idaho	St. Maries, Idaho	24	1.95½	1.56½	7000 ft.	Trainloads of 10 or more cars.
220	Worley, Idaho	St. Maries, Idaho	25	1.95½	1.56½	7000 ft.	Trainloads of 10 or more cars.
220	Setters, Idaho	St. Maries, Idaho	32	1.95½	1.56½	7000 ft.	Trainloads of 10 or more cars.
220	Adair, Idaho	St. Maries, Idaho	63	2.42½	1.94	7000 ft.	Trainloads of 10 or more cars.
210	Plummer, Idaho	St. Maries, Idaho	20	1.80	1.44	7000 ft.	Trainloads of 15 or more cars.
210	Plummer, Idaho	St. Joe, Idaho	32	1.95½	1.56½	7000 ft.	Trainloads of 15 or more cars.
250	Elk River, Idaho	St. Maries, Idaho	72	2.50	2.00	7000 ft.	Trainloads of 20 or more cars (except hardwood).

* On cars of 60,000 lbs. capacity, and 7,000 ft. on cars over 60,000 lbs. capacity.

C., M. & ST. P. LOG DISTANCE SCALES, TARIFF 13825-A

Logs (except hardwood) min. 7000 ft. per car between C., M. & St. P. stations..... West of and including Ellensburg.
Logs (except hardwood) min. 7000 ft. per car between C., M. & St. P. stations..... In Idaho except stations north of McGuires, Idaho.

Logs (except hardwood) min. 8000 ft. per car between C., M. & St. P. stations..... Spokane to Spokane bridge, inclusive.
Logs (except hardwood) min. 8000 ft. per car between C., M. & St. P. stations..... North of and including Tweedie, Wash.
Logs (except hardwood) min. 8000 ft. per car between C., M. & St. P. stations..... In Idaho north of and including McGuires, Idaho.
Logs (except hardwood) min. 8000 ft. per car between C., M. & St. P. stations..... Spokane to Coeur d'Alene, inclusive, and stations in Idaho, north of McGuires, Idaho, on the one hand, and C., M. & St. P. stations north of and including Tweedie, Wash., on the other hand.
Logs (except hardwood) min. 8000 ft. per car between C., M. & St. P. stations..... Spokane to Spokane bridge, inclusive, on the one hand, and stations in Idaho east of Spokane bridge or north of McGuires, Idaho, on the other hand.

Logs, carloads, min. 6000 ft. on cars of 60,000 lbs. capacity; 7000 ft. on cars of over 60,000 lbs. capacity; from C., M. & St. P. stations in Idaho except stations north of Setters, Idaho, to St. Joe and St. Maries, Idaho:

Distance	Rate Effective Aug. 26, 1920	Rate Prior to Aug. 26, 1920	Distance	Rate Effective Aug. 26, 1920	Rate Prior to Aug. 26, 1920
10 miles	$1.56½	$1.25	85 miles	$3.12½	$2.50
15 miles	1.95½	1.56½	90 miles	3.20½	2.56½
20 miles	2.11½	1.69	95 miles	3.28	2.62½
25 miles	2.19	1.75	100 miles	3.28	2.62½
30 miles	2.27	1.81½	110 miles	3.36½	2.69
35 miles	2.34½	1.87½	120 miles	3.44	2.75
40 miles	2.42½	1.94	130 miles	3.52	2.81½
45 miles	2.50	2.00	140 miles	3.59½	2.87½
50 miles	2.58	2.06½	150 miles	3.67½	2.94
55 miles	2.65½	2.12½	160 miles	3.75	3.00
60 miles	2.74	2.19	170 miles	3.83	3.06½
65 miles	2.81½	2.25	180 miles	3.90½	3.12½
70 miles	2.89½	2.31½	190 miles	3.99	3.19
75 miles	2.97	2.37½	200 miles	4.06½	3.25
80 miles	3.05	2.44			

Logs, (except hardwood) min. 6000 ft. per car; between all stations on Tacoma Eastern, Hillsdale (formerly Bismarck) and south thereof:

Distance	Rate Effective Aug. 26, 1920	Rate Prior to Aug. 26, 1920	Distance	Rate Effective Aug. 26, 1920	Rate Prior to Aug. 26, 1920
5 miles	$1.25	$1.00	30 miles	$1.95½	$1.56½
10 miles	1.40½	1.12½	40 miles	2.03	1.62½
15 miles	1.56½	1.25	50 miles	2.11½	1.69
20 miles	1.72	1.37½	70 miles	2.19	1.75
25 miles	1.87½	1.50			

Logs, min. 7000 ft. per car when on cars of 80,000 lbs. capacity or over; on cars of smaller capacity min. will be 5500 ft. (between all stations — Bellingham and north):

Distance	Rate Effective Aug. 26, 1920	Rate Prior to Aug. 26, 1920	Distance	Rate Effective Aug. 26, 1920	Rate Prior to Aug. 26, 1920
5 miles	$1.95½	$1.56½	30 miles	$2.34½	$1.87½
10 miles	1.95½	1.56½	35 miles	2.34½	1.87½
15 miles	2.34½	1.87½	40 miles	2.34½	1.87½
20 miles	2.34½	1.87½	45 miles	2.34½	1.87½
25 miles	2.34½	1.87½	50 miles	2.34½	1.87½

O. W. R. & N. LOG RATES, WESTERN WASHINGTON, TARIFF 483

(Applies on logs other than hardwood, except as noted)

(SINGLE CAR RATES)

ITEM	FROM	TO	Miles	Rate Effective Aug. 26, 1930	Rate Prior to Aug. 26, 1930	Minimum Feet Per Car	REMARKS
55	Wabash	Centralia	2	$1.80	$1.44	6000 ft.	
85	Galvin	Centralia	5	8.00 per car	6.50 per car		Cedar logs.
105	Balch	Callow	5	1.56½	1.25	7000 ft.	
160	Hanna	Cosmopolis	5	1.56½	1.25	7000 ft.	
171	Arctic	Primo	6	1.56½	1.25	7000 ft.	
160	Hanna	Aberdeen	7	1.56½	1.25	7000 ft.	
165	Saginaw	Callow	8	1.56½	1.25	7000 ft.	
220	Vancouver	St. Johns, Ore.	8	2.25	1.80	7000 ft.	
75	Galvin	Chehalis	9	1.56½	1.25	7000 ft.	
160	Hanna	Preachers Slough	9	1.56½	1.25	7000 ft.	
170	Arctic	Preachers Slough	9	1.69	1.35	7000 ft.	
50	Tono	Bucoda	11	1.95½	1.56½	7000 ft.	
160	Hanna	Hoquiam	11	1.56½	1.25	7000 ft.	
130	Saginaw	Montesano	13	1.56½	1.25	7000 ft.	
130	Montesano	Saginaw	13	1.56½	1.25	7000 ft.	
187	Aberdeen	Primo	14	1.95½	1.56½	7000 ft.	
35	Tenino	Chehalis	15	1.95½	1.56½	7000 ft.	
175	Primo	Melbourne	18	1.95½	1.56½	7000 ft.	
195	Winlock	Centralia	18	2.11½	1.69	7000 ft.	
140	Saginaw	Cosmopolis	20	1.72	1.37½	7000 ft.	
40	Polehn	Helsing Junction	21	2.19	1.75	7000 ft.	Cedar logs.
190	Napavine	Helsing Junction	23	2.19	1.75	7000 ft.	
45	Tono	Winlock	25	2.25	1.80	7000 ft.	
125	Lanker	Cosmopolis	25	1.87½	1.50	7000 ft.	
165	Arctic	Saginaw	25	2.25	1.80	7000 ft.	
120	Balch	Bucoda	26	2.27	1.81½	7,000 ft.	Cedar logs.
145	Saginaw	Galvin	26	2.11½	1.69	7000 ft.	
120	Bleckson	Bucoda	27	2.27	1.81½	7000 ft.	Cedar logs.
25	Chehalis	Olympia	30	2.42½	1.94	7000 ft.	
165	Midson	Saginaw	30	2.25	1.80	7000 ft.	
216	Vader	Bucoda	31	2.34½	1.87½	7000 ft.	
188	Aberdeen	Callow	31	2.34½	1.87½	7000 ft.	
125	Lanker	Hoquiam	31	1.95½	1.56½	7000 ft.	
110	Balch	Cosmopolis	33	2.03	1.62½	7000 ft.	
155	Saginaw	Chehalis	35	2.65½	2.12½	7000 ft.	
215	Vader	Helsing Junction	36	2.50	2.00	7000 ft.	
25	Napavine	Olympia	38	2.58	2.06½	7000 ft.	
150	Saginaw	Bucoda	38	2.37½	1.90	7000 ft.	
115	Balch	Hoquiam	39	2.11½	1.69	7000 ft.	
180	Primo	Callow	39	2.62½	2.10	7000 ft.	
70	Galvin	Preachers Slough	42	2.19	1.75	7000 ft.	
80	Galvin	Aberdeen	49	2.34½	1.87½	7000 ft.	Cedar logs.
90	Meadows	Hoquiam	50	2.62½	2.10	7000 ft.	
60	Wabash	Aberdeen	56	2.74	2.19	7000 ft.	
25	Hanna	Olympia	84	3.12½	2.50	7000 ft.	

TRAIN LOAD RATES

185	Primo	Cosmopolis	11	1.95½	1.56½	7000 ft.	Lots of 15 or more cars.
30	Olympia	Kyro	13	1.56½	1.25	7000 ft.	Lots of 10 or more cars.
185	Primo	Aberdeen	14	1.95½	1.56½	7000 ft.	Lots of 15 or more cars.

O. W. R. & N. LOG RATES, WESTERN WASHINGTON, TARIFF 483—Continued
(Applies on logs other than hardwood, except as noted)
(Trainload rates)

ITEM	FROM	TO	Miles	Rate Effective Aug. 26, 1950	Rate Prior to Aug. 26, 1950	Minimum Feet Per Car	REMARKS
185	Primo	Preachers Slough	15	$1.95½	$1.56½	7000 ft.	Lots of 15 or more cars.
135	Saginaw	Preachers Slough	16	1.56½	1.25	7000 ft.	Lots of 15 or more cars.
185	Primo	Hoquiam	17	1.95½	1.56½	7000 ft.	Lots of 15 or more cars.
95	Independence	Preachers Slough	33	1.95½	1.56½	7000 ft.	Lots of 15 or more cars.
210	Winlock	Kyro	42	2.27	1.81½	7000 ft.	Lots of 10 or more cars.
200	Winlock	Cosmopolis	69	2.65½	2.12½	7000 ft.	Lots of 10 or more cars.
200	Winlock	Aberdeen	71	2.65½	2.12½	7000 ft.	Lots of 10 or more cars.
200	Winlock	Hoquiam	75	2.65½	2.12½	7000 ft.	Lots of 10 or more cars.

O. W. R. & N. LOG RATES, IDAHO, EASTERN WASHINGTON AND OREGON, TARIFF 483
(Applies on logs other than hardwood, except as noted)
(Single car rates)

ITEM	FROM	TO	Miles	Rate Effective Aug. 26, 1950	Rate Prior to Aug. 26, 1950	Minimum Feet Per Car	REMARKS
230	Hilgard, Ore.	LaGrande, Ore.	8	$1.56½	$1.25	6000 ft.	
254	Plummer, Idaho	Lacon, Idaho	13	1.72	1.37½	8000 ft.	Including hardwood logs.
250	Watts, Idaho	Lacon, Idaho	16	1.95½	1.56½	8000 ft.	
255	Plummer, Idaho	Springston, Idaho	19	2.11½	1.69	7000 ft.	
265	Coey, Wash.	Spokane, Wash.	23	1.75½	1.40½	8000 ft.	
260	Bradley, Idaho	Springston, Idaho	33	2.50	2.00	8000 ft.	
237	Rondowa, Ore.	LaGrande, Ore.	37	1.56½	1.25	6000 ft.	Including hardwood logs.
270	Amwaco, Idaho	Spokane, Wash.	37	1.75½	1.40½	8000 ft.	Including hardwood logs.
240	Palmer Junction, Ore.	Perry, Ore.	38	1.56½	1.25	6000 ft.	
237	Vincent, Ore.	LaGrande, Ore.	41	1.56½	1.25	6000 ft.	Including hardwood logs.
258	Cedar Creek, Idaho	Spokane, Wash.	130	3.75	3.00	8000 ft.	

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DEPARTMENT'S EXHIBIT C

Present Log Distance Scale and Present Average Log Rate Compared with Various Proposed Scales

Over	Not over	Present distance	Present avg. log rate	Avg. log rate less 21½%	Plot curve of avg. log rate less 21½%	H. O. B. proposed rate	Min. rev. ton miles	Min. rev. car mile 7000	Gray's curve (D)	O. O. C. 1st prop. 21% freeman	Freeman's proposed
0	5 Mi.	156½	1.38	1.083	1.10	1.10	.0519	$1.54	1.00	1.20	1.50
5	10 "	156½	1.378	1.08	1.175	1.20	.0284	.84	1.00	1.30	1.65
10	15 "	195½	1.638	1.285	1.25	1.30	.0204	.606	1.10	1.40	1.80
15	20 "	211½	1.724	1.353	1.34	1.40	.0165	.49	1.20	1.55	1.95
20	25 "	219	1.615	1.267	1.425	1.45	.0137	.406	1.30	1.65	2.10
25	30 "	227	1.84	1.445	1.50	1.50	.0117	.35	1.40	1.75	2.25
30	35 "	234½	2.235	1.754	1.59	1.60	.0107	.32	1.50	1.90	2.40
35	40 "	242½	2.127	1.669	1.67	1.70	.01	.297	1.60	2.00	2.55
40	45 "	250	2.136	1.676	1.75	1.80	.0094	.28	1.69	2.10	2.70
45	50 "	258	2.716	2.135	1.835	1.90	.0089	.266	1.78	2.25	2.85
50	55 "	265½	2.389	1.875	1.92	1.95	.0083	.248	1.86	2.30	3.95
55	60 "	274	2.383	1.87	2.00	2.00	.0078	.233	1.93	2.40	3.05
60	65 "	281½	2.720	2.145	2.075	2.10	.0076	.226	1.99	2.45	3.15
65	70 "	289½	2.744	2.154	2.15	2.20	.0074	.22	2.05	2.55	3.25
70	75 "	297	2.415	1.893	2.25	2.30	.0072	.214	2.11	2.65	3.35
75	80 "	305	2.847	2.234	2.335	2.40	.0070	.21	2.17	2.70	3.45
80	85 "	312½	3.125	2.453	2.42	2.45	.0067	.201	2.23	2.80	3.55
85	90 "	320½	3.205	2.515	2.50	2.50	.0065	.194	2.27	2.85	3.65
90	95 "	328	3.425	2.688	2.585	2.60	.0064	.191	2.31	2.95	3.75
95	100 "	328	3.28	2.574	2.665	2.70	.0063	.189	2.34	3.00	3.85
100	105 "	336½	4.25	3.336	2.75	2.80	.0062	.186	2.39	3.05	3.90
105	110 "	336½	4.39	3.446	2.835	2.90	.0062	.184	2.43	3.10	3.95
110	115 "	344	4.545	3.567	2.925	2.95	.0060	.179	....	3.15	4.00
115	120 "	344	3.44	2.70	3.00	3.00	.0058	.175	....	3.20	4.05
120	125 "	352	3.52	2.763	3.08	3.10	.0058	.173	....	3.20	4.10
125	130 "	352	3.52	2.763	3.165	3.20	.0057	.172	....	3.25	4.15
130	135 "	359½	3.663	2.875	3.25	3.30	.0057	.171	....	3.30	4.20
135	140 "	359½	4.45	3.493	3.335	3.40	.0057	.17	....	3.35	4.25
140	145 "	367½	.....	.....	3.415	3.45	.0056	.166	....	3.40	4.30
145	150 "	367½	.....	.....	3.50	3.50	.0055	.163	....	3.40	4.35

NOTE.—The present average log rate represents actual movement of the Northern Pacific, Chicago, Milwaukee & St. Paul Ry., Great Northern Railway and Oregon-Washington Railroad & Navigation Company during 1920, applying to same the rates in effect at the present time.

[fol. 194-1]

Application of Proposed Rates to Actual Traffic Movement of Logs Reported by Carriers During 1920

Represents Northern Pacific Railway Movement, January to November, 1920, inclusive; Chicago, Milwaukee & St. Paul Railway Movement April to December, 1919, inclusive; Great Northern Railway Movement, Calendar Year 1920; Oregon-Washington Railroad & Navigation Co. Movement, Calendar Year 1920

Distance	Cars	Present rate	Amount	Proposed Freeman	Amount	Plot curve of avg. log rates less 21½%	Amount	Proposed rate	Amount
1 to 5 M.....	3,869	1.25	$4,836.25	1.50	$5,803.50	1.10	$4,255.90	1.10	$4,255.90
1 " 5 "	2,428	1.405	3,411.34	1.50	3,462.00	1.10	2,670.80	1.10	2,670.80
1 " 5 "	1,857	1.565	2,906.205	1.50	2,785.50	1.10	2,042.70	1.10	2,042.70
3 " 5 "	5	1.80	9.00	1.50	7.50	1.10	5.50	1.10	5.50
1 " 5 "	3	1.955	5.865	1.50	4.50	1.10	2.20	1.10	3.30
1 " 5 "	46	3.52	161.92	1.50	69.00	1.10	50.60	1.10	50.60
6 " 10 "	2,496	.94	2,346.24	1.65	4,118.40	1.175	2,932.80	1.20	2,995.20
6 " 10 "	1,776	1.25	2,220.00	1.65	2,930.40	1.175	2,086.80	1.20	2,131.20
6 " 10 "	2,284	1.33	3,037.72	1.65	3,768.60	1.175	2,683.70	1.20	2,740.80
6 " 10 "	1,593	1.405	2,238.165	1.65	2,628.45	1.175	1,871.776	1.20	1,911.60
6 " 10 "	3,083	1.565	4,824.895	1.65	5,086.95	1.175	3,622.525	1.20	3,699.60
6 " 10 "	157	1.645	258.265	1.65	259.05	1.175	184.475	1.20	188.40
6 " 10 "	2,041	1.69	3,449.29	1.65	3,367.65	1.175	2,398.175	1.20	2,449.20
6 " 10 "	5	1.80	9.00	1.65	8.25	1.175	5.875	1.20	6.00
6 " 10 "	217	1.955	424.235	1.65	358.05	1.175	254.975	1.20	260.40
11 " 15 "	7,750	1.405	10,888.75	1.80	13,950.00	1.25	9,687.50	1.30	10,075.00
11 " 15 "	7,818	1.565	12,235.17	1.80	14,072.40	1.25	9,772.50	1.30	10,163.40
11 " 15 "	891	1.625	1,447.875	1.80	1,603.80	1.25	1,113.75	1.30	1,158.30
11 " 15 "	24	1.72	41.28	1.80	43.20	1.25	30.00	1.30	31.20
11 " 15 "	111	1.875	208.125	1.80	199.80	1.25	138.75	1.30	144.30
11 " 15 "	6,924	1.955	13,536.42	1.80	12,463.20	1.25	8,655.00	1.30	9,001.20
11 " 15 "	177	2.115	374.355	1.80	318.60	1.25	221.25	1.30	230.10
11 " 15 "	103	2.345	241.535	1.80	185.40	1.24	128.75	1.30	133.90
16 " 20 "	1,092	1.405	1,534.26	1.95	2,129.40	1.34	1,463.28	1.40	1,528.80
16 " 20 "	13,330	1.565	20,861.45	1.95	25,993.50	1.34	17,862.20	1.40	18,662.00
16 " 20 "	3,855	1.72	6,630.60	1.95	7,517.25	1.34	5,165.70	1.40	5,397.00
16 " 20 "	5	1.755	8.755	1.95	9.75	1.34	6.70	1.40	7.00
16 " 20 "	109	1.80	196.20	1.95	212.55	1.34	146.06	1.40	152.60
16 " 20 "	1,133	1.875	2,124.375	1.95	2,209.35	1.34	1,518.22	1.40	1,586.20
16 " 20 "	328	1.955	641.24	1.95	639.60	1.34	439.52	1.40	459.20
16 " 20 "	2,536	2.03	5,148.08	1.95	4,945.20	1.34	3,398.24	1.40	3,550.40
16 " 20 "	3,059	2.115	6,469.785	1.95	5,965.05	1.34	4,099.06	1.40	4,282.60
16 " 20 "	3	2.19	6.57	1.95	5.85	1.34	4.02	1.40	4.20
16 " 20 "	287	2.27	651.49	1.95	559.65	1.34	384.58	1.40	401.80
16 " 20 "	163	2.345	382.235	1.95	317.85	1.34	218.42	1.40	228.20
16 " 20 "	3	3.125	9.375	1.95	5.85	1.34	4.02	1.40	4.20
21 " 25 "	24,991	1.565	30,110.915	2.10	52,481.30	1.425	35,612.175	1.45	36,236.93
21 " 25 "	2,678	1.645	4,405.31	2.10	5,623.80	1.425	3,816.15	1.45	3,883.10
21 " 25 "	561	1.72	964.92	2.10	1,178.10	1.425	799.425	1.45	813.45
21 " 25 "	98	1.875	183.75	2.10	205.80	1.425	139.65	1.45	142.10
21 " 25 "	979	2.19	2,144.01	2.10	2,055.90	1.425	1,395.07	1.45	1,419.55
21 " 25 "	284	2.25	639.00	2.10	596.40	1.425	404.70	1.45	411.80
21 " 25 "	186	2.34	1,139.67	2.10	1,020.60	1.435	692.55	1.45	704.70
21 " 25 "	6	2.50	15.00	2.10	12.60	1.425	8.55	1.45	8.70

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26 " 30 "	20,502	1.565	32,085.63	2.25	46,129.50	1.50	30,753.00	1.50	30,753.00
26 " 30 "	3,363	1.955	6,580.53	2.25	7,573.50	1.50	5,049.00	1.50	5,049.00
26 " 30 "	314	2.03	638.42	2.25	706.50	1.50	471.00	1.50	471.00
26 " 30 "	6	2.19	13.14	2.25	13.50	1.50	9.00	1.50	9.00
26 " 30 "	11,556	2.27	26,232.12	2.25	26,001.00	1.50	17,334.00	1.50	17,334.00
26 " 30 "	48	2.345	112.56	2.25	108.00	1.50	72.00	1.50	72.00
26 " 30 "	50	2.375	118.75	2.25	112.50	1.50	75.00	1.50	75.00
26 " 30 "	147	3.125	459.375	2.25	330.75	1.50	220.50	1.50	220.50
31 " 35 "	2,062	1.955	4,031.21	2.40	4,948.80	1.59	3,278.58	1.60	3,299.20
31 " 35 "	531	2.03	1,077.93	2.40	1,274.40	1.59	844.29	1.60	849.60
31 " 35 "	2,436	2.19	5,334.84	2.40	5,846.40	1.59	3,873.24	1.60	3,897.60
31 " 35 "	1,733	2.345	4,063.885	2.40	4,159.20	1.59	2,755.46	1.60	2,772.80
31 " 35 "	28	2.625	73.50	2.40	67.20	1.59	44.52	1.60	44.80
31 " 35 "	935	2.815	2,632.025	2.40	2,244.00	1.59	1,486.05	1.60	1,496.00
31 " 35 "	42	3.52	147.84	2.40	100.80	1.59	66.78	1.60	67.20
36 " 40 "	2,111	1.645	3,472.595	2.55	5,383.05	1.67	3,525.37	1.70	3,588.70
36 " 40 "	1,342	1.875	2,516.25	2.55	3,422.10	1.67	2,241.14	1.70	2,281.40
36 " 40 "	493	1.955	963.815	2.55	1,257.115	1.67	823.31	1.70	838.10
36 " 40 "	2,265	2.115	4,790.475	2.55	5,775.75	1.67	3,782.55	1.70	3,850.50
36 " 40 "	734	2.425	1,779.95	2.55	1,871.70	1.67	1,225.78	1.70	1,247.80
36 " 40 "	1,830	2.50	4,575.00	2.55	4,666.50	1.67	3,056.10	1.70	3,111.00
36 " 40 "	564	3.125	1,762.50	2.55	1,438.20	1.67	941.88	1.70	958.80
41 " 45 "	9,869	1.955	19,293.895	2.70	26,646.30	1.75	17,270.75	1.80	17,764.20
41 " 45 "	8	2.03	16.24	2.70	21.60	1.75	14.00	1.80	14.40
41 " 45 "	243	2.115	513.945	2.70	656.10	1.75	425.25	1.80	437.40
41 " 45 "	395	2.345	926.275	2.70	1,066.50	1.75	691.25	1.80	711.00
41 " 45 "	4,394	2.50	13,007.00	2.70	14,088.00	1.75	7,689.50	1.80	7,909.20
41 " 45 "	77	2.625	202.125	2.70	207.90	1.75	134.75	1.80	138.60
41 " 45 "	141	2.655	374.355	2.70	380.70	1.75	246.75	1.80	253.80
46 " 50 "	708	2.115	1,497.42	2.85	2,017.80	1.835	1,299.18	1.90	1,345.20
46 " 50 "	276	2.345	647.22	2.85	786.60	1.835	506.46	1.90	524.40
46 " 50 "	639	2.58	1,648.62	2.85	1,821.15	1.835	1,172.565	1.90	1,214.10
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1,919	[illegible]	[illegible]	[illegible]	2,878.50	1.835	1,853.35	1.90	1,919.00

36 " 40 "	564	3.125	1,762.50	2.55	1,438.20	1.67	941.88	1.70	[illegible]
41 " 45 "	9,869	1.955	19,293.895	2.70	26,646.30	1.75	17,270.75	1.80	17,764.20
41 " 45 "	8	2.03	16.24	2.70	21.60	1.75	14.00	1.80	14.40
41 " 45 "	243	2.115	513.945	2.70	656.10	1.75	425.25	1.80	437.40
41 " 45 "	395	2.345	926.275	2.70	1,066.50	1.75	691.25	1.80	711.00
41 " 45 "	4,394	2.50	13,007.00	2.70	14,088.00	1.75	7,689.50	1.80	7,909.20
41 " 45 "	77	2.625	202.125	2.70	207.90	1.75	134.75	1.80	138.60
41 " 45 "	141	2.655	374.355	2.70	380.70	1.75	246.75	1.80	253.80
46 " 50 "	708	2.115	1,497.42	2.85	2,017.80	1.835	1,299.18	1.90	1,345.20
46 " 50 "	276	2.345	647.22	2.85	786.60	1.835	506.46	1.90	524.40
46 " 50 "	639	2.58	1,648.62	2.85	1,821.15	1.835	1,172.565	1.90	1,214.10
46 " 50 "	1,010	2.875	2,903.75	2.85	2,878.50	1.835	1,853.35	1.90	1,919.00
46 " 50 "	1,106	3.125	3,456.25	2.85	3,152.10	1.835	2,029.51	1.90	2,101.40
51 " 55 "	893	2.115	1,888.695	2.95	2,634.85	1.92	1,714.56	1.95	1,741.35
51 " 55 "	688	2.19	1,506.72	2.95	2,029.60	1.92	1,320.96	1.95	1,361.10
51 " 55 "	4,718	2.345	11,063.71	2.95	13,918.10	1.92	9,058.56	1.95	9,200.10
51 " 55 "	38	2.425	92.15	2.95	112.10	1.92	72.96	1.95	74.10
51 " 55 "	462	2.50	1,155.00	2.95	1,362.90	1.92	887.04	1.95	900.00
51 " 55 "	2,012	2.655	5,341.86	2.95	5,935.40	1.92	3,863.04	1.95	3,923.40
51 " 55 "	1	2.815	2.815	2.95	2.95	1.92	1.92	1.95	1.95
56 " 60 "	82	1.875	153.75	3.05	250.10	2.00	164.00	2.00	164.00
56 " 60 "	894	2.115	1,890.81	3.05	2,726.70	2.00	1,788.00	2.00	1,788.00
56 " 60 "	6	2.19	13.14	3.05	18.30	2.00	12.00	2.00	12.00
56 " 60 "	3,927	2.345	9,208.815	3.05	11,977.35	2.00	7,854.00	2.00	7,854.00
56 " 60 "	23	2.655	61.065	3.05	70.15	2.00	46.00	2.00	46.00
56 " 60 "	253	2.74	693.22	3.05	771.65	2.00	506.00	2.00	506.00
56 " 60 "	245	3.75	918.75	3.05	747.25	2.00	490.00	2.00	490.00
61 " 65 "	1,043	2.655	2,769.165	3.15	3,285.45	2.075	2,164.225	2.10	2,190.30
61 " 65 "	913	2.815	2,570.095	3.15	2,875.95	2.075	1,894.475	2.10	1,917.30
66 " 70 "	263	2.425	637.775	3.25	854.75	2.15	565.45	2.20	578.60
66 " 70 "	515	2.58	1,328.70	3.25	1,673.75	2.15	1,107.25	2.20	1,133.00
66 " 70 "	1,117	2.895	3,233.715	3.25	3,630.25	2.15	2,401.55	2.20	2,457.40
[fol. 194-3]									
71 " 75 "	388	2.115	820.62	3.35	1,299.80	2.25	873.00	2.30	892.40
71 " 75 "	99	2.97	294.03	3.35	331.65	2.25	222.75	2.30	227.70
71 " 75 "	54	3.52	190.08	3.35	180.90	2.25	121.50	2.30	124.20
76 " 80 "	1,655	2.815	4,658.825	3.45	3,709.75	2.335	3,864.425	2.40	3,972.00
76 " 80 "	165	3.05	503.25	3.45	569.25	2.335	385.275	2.40	396.00
81 " 85 "	202	3.125	631.25	3.55	717.10	2.42	488.84	2.45	494.90
86 " 90 "	12	3.205	38.46	3.65	43.10	2.50	30.00	2.50	30.00
91 " 95 "	128	3.28	419.83	3.75	480.00	2.585	330.88	2.60	332.80
91 " 95 "	29	4.065	117.885	3.75	108.75	2.585	74.965	2.60	75.40
96 " 100 "	411	3.28	1,348.08	3.85	1,582.35	2.665	1,095.315	2.70	1,109.70
101 " 105 "	1	2.365	3.365	3.90	3.90	2.75	2.75	2.80	2.80
101 " 105 "	2	4.69	9.38	3.90	7.80	2.75	5.50	2.80	5.60
106 " 110 "	15	3.365	50.475	3.95	59.25	2.835	42.525	2.90	43.50
106 " 110 "	19	4.065	77.235	3.95	75.05	2.835	53.865	2.90	55.10
106 " 110 "	72	4.69	337.68	3.95	284.40	2.835	204.12	2.90	208.80
111 " 115 "	12	3.44	41.28	4.00	48.00	2.925	35.10	2.95	35.40
111 " 115 "	92	4.69	431.48	4.00	368.00	2.925	269.10	2.95	271.40
116 " 120 "	139	3.44	478.16	4.05	562.95	3.00	417.00	3.00	417.00
121 " 125 "	4	3.52	14.08	4.10	16.40	3.08	12.32	3.10	12.40
126 " 130 "	2	3.52	7.04	4.15	8.30	3.165	6.33	3.20	6.40
131 " 135 "	18	3.595	64.71	4.20	75.60	3.25	58.50	3.30	59.40
131 " 135 "	1	4.875	4.875	4.20	4.20	3.25	3.25	3.30	3.30
136 " 140 "	1	3.595	3.595	4.25	4.25	3.335	3.335	3.40	3.40
136 " 140 "	2	4.875	9.75	4.25	8.50	3.335	6.67	3.40	6.80
	195,221		365,412.725 *7		435,939.40 *7		292,177.38 *7		297,978.75 *7
			2,557,889.075		3,051,575.80 19.3% Increase		2,045,241.66 20% Reduction		2,085,851.25 18.45% Red.
Revenue per car mile.....			.4750		.5670		.3803		.3879
Revenue per ton mile.....			.0138		.0165		.0110		.0113

The revenue per car mile and per ton mile has been secured by dividing the number of car miles and the number of ton miles into the revenue shown above. The car miles and ton miles of the movement covered by this statement are as follows:

	Car miles	Ton miles
Northern Pacific Railway Company.....	2,773,302	95,140,922
Chicago, Milwaukee & St. Paul Railway Co.	1,689,344	57,954,635
Great Northern Railway Company	675,451	23,172,022
Oregon-Washington Railroad & Nav. Co.	238,789	8,191,926
Total	5,376,886	184,549,505

* The amounts specified in this statement are simply computations secured by multiplying the number of cars for each distance by the present rate per M feet. In order to secure the total revenue the total amounts are multiplied by seven this representing the minimum number of thousand feet per car.

CHART

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LARGE

FOR

FILMING

[fol. 195–3] Comparison of Proposed Rate with Present Rates, Also Gray's Proposed Trainload and Required Single Car Rate

Distance	Present trainload rate	Gray's proposed trainload rate	Present sgl. car distance rate	Sgl. car rate required by Gray's trainload rates	Difference Gray's trainload and required single car rates	Proposed rate sgl. cars only	Difference Gray's trainload and proposed rate	Difference Gray's required single car and proposed rate
1 to 5 Miles	$1.25	$1.00	$1.56½	$1.20	$.20	$1.10	$.10	$.10
do.	1.40½	1.00	1.56½	1.20	.20	1.10	.10	.10
6 to 10 Miles	1.64½	1.00	1.56½	1.30	.30	1.20	.20	.10
11 to 15 Miles	1.40½	1.08	1.95½	1.40	.32	1.30	.22	.10
do.	1.56½	1.08	1.95½	1.40	.32	1.30	.22	.10
do.	1.95½	1.08	1.95½	1.40	.32	1.30	.22	.10
16 to 20 Miles	1.45½	1.16	2.11½	1.50	.34	1.40	.24	.10
do.	1.56½	1.16	2.11½	1.50	.34	1.40	.24	.10
do.	1.80	1.16	2.11½	1.50	.34	1.40	.24	.10
21 to 25 Miles	1.56½	1.24	2.19	1.60	.36	1.45	.21	.15
do.	1.64½	1.24	2.19	1.60	.36	1.45	.21	.15
do.	1.72	1.24	2.19	1.60	.36	1.45	.21	.15
do.	1.87½	1.24	2.19	1.60	.36	1.45	.21	.15
26 to 30 Miles	1.56½	1.32	2.27	1.65	.33	1.50	.18	.15
do.	1.95½	1.32	2.27	1.65	.33	1.50	.18	.15
do.	2.03	1.32	2.27	1.65	.33	1.50	.18	.15
31 to 35 Miles	1.95½	1.40	2.34½	1.75	.35	1.60	.20	.15
36 to 40 Miles	1.64½	1.48	2.42½	1.85	.37	1.70	.22	.15
do.	1.87½	1.48	2.42½	1.85	.37	1.70	.22	.15
do.	1.95½	1.48	2.42½	1.85	.37	1.70	.22	.15

Comparison of Proposed Rate with Present Rates—Continued

Distance	Present trainload rate	Gray's proposed trainload rate	Present sgl. car distance rate	Sgl. car rate required by Gray's trainload rates	Difference Gray's trainload and required single car rates	Proposed rate sgl. cars only	Difference Gray's trainload and proposed rate	Difference Gray's required single car and proposed rate
36 to 40 Miles	2.11½	1.48	2.42½	1.85	.37	1.70	.22	.15
41 to 45 Miles	1.95½	1.56	2.50	1.95	.39	1.80	.24	.15
do.	2.03	1.56	2.50	1.95	.39	1.80	.24	.15
do.	2.34½	1.56	2.50	1.95	.39	1.80	.24	.15
46 to 50 Miles	2.34½	1.64	2.58	2.05	.41	1.90	.26	.15
51 to 55 Miles	2.11½	1.71	2.65½	2.15	.44	1.95	.24	.20
do.	2.34½	1.71	2.65½	2.15	.44	1.95	.24	.20
do.	2.42½	1.71	2.65½	2.15	.44	1.95	.24	.20
do.	2.50	1.71	2.65½	2.15	.44	1.95	.24	.20
do.	2.65½	1.71	2.65½	2.15	.44	1.95	.24	.20
56 to 60 Miles	1.87½	1.78	2.74	2.20	.42	2.00	.22	.20
do.	2.11½	1.78	2.74	2.20	.42	2.00	.22	.20
do.	2.34½	1.78	2.74	2.20	.42	2.00	.22	.20
do.	2.65½	1.78	2.74	2.20	.42	2.00	.22	.20
61 to 65 Miles	2.65½	1.85	2.81½	2.30	.45	2.10	.25	.20
66 to 70 Miles	2.42½	1.92	2.89½	2.40	.48	2.20	.28	.20
do.	2.58	1.92	2.89½	2.40	.48	2.20	.28	.20
71 to 75 Miles	2.11½	1.99	2.97	2.50	.51	2.30	.31	.20
76 to 80 Miles	2.81½	2.06	3.05	2.60	.54	2.40	.34	.20
80 to 85 Miles	....	2.13	3.12½	2.70	.57	2.45	.32	.25
86 to 90 Miles	....	2.20	3.20½	2.75	.55	2.50	.30	.25

91 to 95 Miles	....	2.27	3.28	2.85	.58	2.60	.33	.25
96 to 100 Miles	....	2.34	3.28	2.95	.61	2.70	.36	.25
101 to 105 Miles	....	2.41	3.36½	3.05	.64	2.80	.39	.25
106 to 110 Miles	....	2.41	3.36½	3.15	.74	2.90	.49	.25
111 to 115 Miles	....	2.48	3.44	3.25	.77	2.95	.47	.30
116 to 120 Miles	....	2.48	3.44	3.30	.82	3.00	.52	.30
121 to 125 Miles	....	2.55	3.52	3.40	.85	3.10	.55	.30
126 to 130 Miles	....	2.55	3.52	3.50	.95	3.20	.65	.30
131 to 135 Miles	....	2.62	3.59½	3.60	.98	3.30	.68	.30
136 to 140 Miles	....	2.62	3.59½	3.70	1.08	3.40	.78	.30
141 to 145 Miles	....	2.69	3.67½	3.80	1.11	3.45	.76	.35
146 to 150 Miles	....	2.69	3.67½	3.85	1.16	3.50	.81	.35

[fol. 196]

ASSOCIATED LOG SHIPPERS' EXHIBIT No. 1

DPW-5159. ALS-DH. HLG-506

Comparative Unit Revenues from Freight Traffic, 1919

System and State

Compiled from Carrier's Annual Reports

	Northern Pacific	Great Northern	Chicago Milwaukee	Oregon-Washington	Combined lines
Freight Transportation Revenue per 1,000 Revenue Net Ton Miles, System	$9.62	$9.70	$9.24	$11.92	$9.62
Freight Transportation Revenue per 1,000 Revenue Net Ton Miles, State	10.85	10.83	9.48	13.78	10.84
Total Freight Service Revenue per 1,000 Revenue Net Ton Miles, System	9.84	9.91	9.62	12.21	9.91
Total Freight Service Revenue per 1,000 Revenue Net Ton Miles, State	11.42	11.18	9.88	14.42	11.32

Freight Transportation Revenue is that shown in Account 101. Total Freight Service Revenue covers Accounts 101, 109, 110, 112, 135, 137, 139, and 140.

ASSOCIATED LOG SHIPPERS' EXHIBIT No. 2

DPW-5159. ALS-DI. HLG-506

Log Traffic Statistics, State of Washington, 1920

	Northern Pacific	Great Northern	Chicago Milwaukee	Oregon-Washington	Grand total
1. Number of Loaded Cars	105,405	21,483	93,244	15,892	236,024
2. Total M Board Feet Hauled	868,714	140,389	604,893	129,311	1,743,307
3. Total Net Tonnage	3,605,163	582,616	2,510,306	536,641	7,234,724
4. Total Loaded Car Miles	3,322,256	687,969	2,304,545	238,702	6,553,472
5. Total Freight Bill	$1,364,836	$318,490	$918,944	$199,450	$2,801,720
6. Board Feet per Loaded Car	8,242	6,535	6,487	8,137	7,386
7. Net Tons per Loaded Car	34.20	27.12	26.92	33.77	30.65
8. Average Haul per Loaded Car	31.52	32.02	24.72	15.02	27.77
9. Straight Average of Loaded Hauls	35.82	35.09	26.43	18.96	29.08
10. Revenue per Loaded Car	$12.95	$14.83	$9.86	$12.55	$11.87
11. Revenue per M Board Feet	$1.571	$2.269	$1.519	$1.542	$1.607
12. Revenue per Loaded Car Mile	$0.41082	$0.46294	$0.39875	$0.83556	$0.42752
13. Revenue per Net Ton Mile	$0.01201	$0.01735	$0.01481	$0.02474	$0.01395

The first period mentioned above covers the months of January to August, inclusive, the second period covering the remainder of the year.

All of the figures shown above relate solely to intrastate traffic, except in the case of the C. M. & St. P., the figures for which include a small amount of interstate traffic. The elimination of these interstate figures would not noticeably affect the unit revenues shown.

All statistics shown for the Great Northern and the Oregon-Washington were taken directly from exhibits or reports filed by those carriers, or were obtained by additions, subtractions, multiplications, or divisions of such figures.

The figures shown for the Northern Pacific were taken from exhibits filed by that carrier, these exhibits covering 11 months of the year 1920. In order to arrive at statistics of the 12 months' period, those for the months of September, October and November were increased one-third.

The statistics shown for the C. M. & St. P. were based upon the exhibits filed by that carrier covering the year 1919. It was assumed that the volume of traffic would be the same for 1920 as for 1919. The number of loaded cars, loaded car miles, and board feet for the last four months of the year were taken directly from carrier's exhibit No. 2, with the necessary multiplications. The total freight bill was arrived at by increasing the average 1919 revenue per loaded car by 25 per cent, and then multiplying this increased revenue by the total loaded cars handled during the last four months of the year.

ASSOCIATED LOG SHIPPERS' EXHIBIT NO. 3

DPW-5159. ALS-DK. HLG-506

Comparative Freight Revenues, Logs and Other Commodities, State of Washington, 1920

	Northern Pacific	Great Northern	Chicago Milwaukee	Oregon-Washington	Grand total
1. Total Revenue from Transportation of Intrastate Freight, Other than Logs.....	$7,428,133	$3,492,146	$2,098,943	$1,164,420	$14,183,642
2. Total Revenue from Transportation of Intrastate Log Shipments	$1,364,836	$318,490	$918,944	$199,450	$2,801,720
3. Total Revenue from Transportation of Intrastate Freight	$8,792,969	$3,810,636	$3,017,887	$1,363,870	$16,985,362
4. Total Revenue from Transportation of Interstate Freight	$11,322,784	$7,411,713	$4,347,895	$4,862,840	$27,945,232
5. Total Revenue from Transportation of Freight, Other than Intrastate Logs.....	$18,750,917	$10,903,859	$6,446,838	$6,027,260	$42,128,874
6. Revenue Ton Miles of Intrastate Freight, Other than Logs	542,123,536	298,841,580	197,972,646	55,325,562	1,094,235,741
7. Revenue Ton Miles, Intrastate Log Shipments	113,621,155	18,657,719	62,038,351	8,060,967	202,378,192
8. Revenue Ton Miles, Total Intrastate Freight	655,744,691	317,499,299	260,010,997	63,386,529	1,296,641,516
9. Revenue Ton Miles, Total Interstate Freight	983,617,037	703,927,270	482,848,995	406,081,414	2,576,474,716

Comparative Freight Revenues—Continued

	Northern Pacific	Great Northern	Chicago Milwaukee	Oregon-Washington	Grand total
10. Revenue Ton Miles, All Freight Other than Intrastate Logs	1,525,740,573	1,002,768,850	680,821,641	461,406,976	3,670,738,040
11. Revenue per 1,000 Ton Miles of Intrastate Freight, Other than Logs	$13.67	$11.68	$10.60	$21.05	$12.96
12. Revenue per 1,000 Ton Miles of Intrastate Log Shipments	$12.01	$17.07	$14.81	$24.74	$13.84
13. Revenue per 1,000 Ton Miles of Intrastate Freight	$13.41	$12.00	$11.61	$21.52	$13.10
14. Revenue per 1,000 Ton Miles of Interstate Freight	$11.51	$10.54	$9.01	$11.98	$10.85
15. Revenue per 1,000 Ton Miles of all Freight other than Intrastate Logs	$12.29	$10.87	$9.47	$13.06	$11.48

In the case of the Oregon-Washington, the number of Intrastate Ton Miles of Revenue Freight within the state was known. In the case of the remaining carriers, the percentages of Intrastate Ton Miles were assumed to be as follows: Northern Pacific, 40; Great Northern, 35; Chicago-Milwaukee, 35.

In the case of the Great Northern, no Freight Revenue, Expenses or Revenue Ton Miles were available for 1920. Hence such data were derived by using 1919 figures as bases, and applying the percentages of increase found in the case of the Northern Pacific.

In the case of the C. M. & St. P., the log shipments shown for 1920 are based upon 1919 traffic, as explained in another place. The total earnings shown are reported as correct.

L. C. L. Freight never constitutes more than about 3 per cent of the Revenue Tons hauled within the state. The ton mileage of L. C. L. freight would be even less.

ASSOCIATED LOG SHIPPERS' EXHIBIT NO. 4

DPW-5159. ALS-DM. HLG-506.

Comparative Financial Results, Log Traffic and Other Traffic, State of Washington, 1920

	Northern Pacific	Great Northern	Chicago Milwaukee	Oregon-Washington	Grand total
1. Cost of Freight Operation...	$21,282,037	$15,030,158	$10,821,922	$6,983,512	$54,117,629
2. Total Car Miles, Loaded and Empty	97,587,862	55,018,529	47,743,436	27,373,686	227,723,513
3. Total Tare Ton Miles.....	1,854,169,378	1,045,352,051	907,125,284	520,100,034	4,326,746,747
4. Total Net Ton Miles.....	2,009,495,141	1,063,948,952	865,474,809	536,470,034	4,475,388,936
5. Total Gross Ton Miles.....	3,863,664,519	2,109,301,003	1,772,600,093	1,056,570,068	8,802,135,683
6. Freight Operating Cost, M. Gross Ton Miles	$5.508	$7.126	$6.105	$6.609	$6.148
7. Log Car Miles, Loaded and Empty	6,644,512	1,375,938	4,609,090	477,404	13,106,944
8. Tare Ton Miles, Log Cars...	93,023,168	19,263,132	64,527,260	6,683,656	183,497,216
9. Net Ton Miles, Logs.....	113,621,155	18,657,719	62,038,351	8,060,967	202,378,192
10. Gross Ton Miles, Log Traffic.	206,644,323	37,920,851	126,565,611	14,744,623	385,875,408
11. Cost of Operation, Log Traffic	$1,138,197	$270,224	$772,683	$97,447	$2,278,551

Comparative Financial Results—Continued

	Northern Pacific	Great Northern	Chicago Milwaukee	Oregon-Washington	Grand total
12. Revenue from Logs, Gross..	$1,364,836	$318,490	$918,944	$199,450	$2,801,720
13. Revenue from Logs, Net....	$226,639	$48,266	$146,261	$102,003	$523,169
14. Revenue from Other Freight, Net	$1,392,923*	$3,856,075*	$3,602,401*	$858,805*	$9,710,204*
15. Incidental Freight Revenue.	$802,616	$276,185	$183,730	$214,086	$1,476,617

In the case of the Great Northern, the Total Operating Cost, and Total Car Miles shown were computed by multiplying the 1919 figures by the percentage of increase found in the case of the Northern Pacific.

The Total Tare Ton Miles shown on Line 3 were found by multiplying the figures shown in Line 2 by 19 Tons.

The Log Car Tare Ton Miles shown on Line 8 were found by multiplying the figures shown on Line 7, by 14 Tons.

The figures shown in Line 14 represent the difference between the total of Account 101, (exclusive of Log Traffic Earnings), and the Total Freight Operating Cost, (less that part assigned to Log Traffic on Line 11).

Line 15 shows the total of Accounts 110, 112, 135, 137 and 140. A portion of this revenue should be credited to the Log Traffic.

In brief, this table shows that during 1920 the four principal carriers made a profit over total operation from State Log Traffic of at least $523,169; and at the same time sustained a corresponding loss of at least $8,233,587 (14-15) on all other Freight Traffic Handled in the State.

*Denotes red figures.

[fol. 196-5]

ASSOCIATED LOG SHIPPERS' EXHIBIT No. 5

DPW-5159. ALS-DN. HLG-506

Plain and Stepped Curves of Washington Log Rates in Effect Prior to August 26, 1920

Miles	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0– 5	$0.90	$1.00	$0.95	$1.00	$1.18	$1.25	$1.16	$1.20	$1.06	$1.16	$1.12	$1.20	$1.26	$1.34	$1.23
5– 10	1.25	1.13	1.05	1.00	1.30	1.25	1.25	1.20	1.26	1.16	1.29	1.20	1.42	1.34	1.34
10– 15	1.46	1.35	1.15	1.10	1.42	1.36	1.34	1.30	1.46	1.35	1.46	1.37	1.58	1.50	1.45
15– 20	1.60	1.53	1.25	1.20	1.54	1.48	1.44	1.40	1.65	1.55	1.63	1.54	1.74	1.66	1.55
20– 25	1.73	1.66	1.35	1.30	1.66	1.60	1.55	1.50	1.84	1.74	1.80	1.72	1.90	1.82	1.66
25– 30	1.84	1.78	1.45	1.40	1.78	1.72	1.63	1.59	2.04	1.94	1.97	1.88	2.06	1.98	1.76
30– 35	1.94	1.89	1.55	1.50	1.90	1.84	1.73	1.68	2.23	2.13	2.10	2.03	2.22	2.14	1.86
35– 40	2.03	1.98	1.65	1.60	2.02	1.96	1.82	1.77	2.42	2.33	2.19	2.14	2.38	2.30	1.96
40– 45	2.11	2.07	1.74	1.69	2.14	2.08	1.91	1.86	2.62	2.52	2.28	2.23	2.54	2.46	2.07
45– 50	2.19	2.15	1.82	1.78	2.26	2.20	2.01	1.96	2.82	2.72	2.35	2.31	2.70	2.62	2.16
50– 55	2.26	2.23	1.89	1.86	2.38	2.32	2.11	2.06	3.01	2.91	....	....	2.84	2.77	2.25
55– 60	2.33	2.29	1.96	1.93	2.50	2.44	2.20	2.15	3.20	3.10	....	....	2.97	2.90	2.31
60– 65	2.39	2.36	2.02	1.99	2.62	2.56	2.30	2.25	3.39	3.29	....	....	3.07	3.02	2.37
65– 70	2.45	2.42	2.08	2.05	2.74	2.68	2.39	2.33	3.59	3.49	....	....	3.15	3.11	2.42
70– 75	2.50	2.47	2.14	2.11	2.85	2.79	2.48	2.43	3.78	3.68	....	....	3.22	3.18	2.46
75– 80	2.55	2.53	2.20	2.17	2.94	2.87	2.57	2.53	3.98	3.88	....	....	3.29	3.25	2.50
80– 85	2.59	2.57	2.25	2.23	3.04	2.98	2.67	2.62	....	....	....	....	3.34	3.32	2.53
85– 90	2.63	2.61	2.29	2.27	3.12	3.08	2.77	2.72	....	....	....	....	3.39	3.37	2.56
90– 95	2.67	2.65	2.33	2.31	3.19	3.15	....	....	....	....	....	....	3.43	3.41	2.59
95–100	2.71	2.69	2.36	2.34	3.25	3.22	....	....	....	....	....	....	3.47	3.45	2.63
100–110	2.78	2.74	2.42	2.39	2.35	3.30	....	....	....	....	....	....	3.54	3.48	2.70
110–120	2.85	2.81	2.46	2.43	3.40	3.38	....	....	....	....	....	....	3.58	3.56	2.77
120–130	2.91	2.88	....	....	3.44	3.42	....	....	....	....	....	....	3.62	3.60	2.83
130–140	2.95	2.93	....	....	....	....	....	....	....	....	....	....	3.65	3.63	2.91
140–150	2.97	2.96	....	....	....	....	....	....	....	....	....	....	....	....	2.98
150–160	3.01	2.99	....	....	....	....	....	....	....	....	....	....	....	....	3.05
160–170	3.03	3.02	....	....	....	....	....	....	....	....	....	....	....	....	....

A. Plain Curve Average of Western Washington Single Car Rates.
B. Step Curve Average of Western Washington Single Car Rates.
C. Plain Curve Average of Western Washington Trainload Rates.
D. Step Curve Average of Western Washington Trainload Rates.
E. Plain Curve Average Eastern Washington Single Car Rates.
F. Step Curve Average Eastern Washington Single Car Rates.
G. Plain Curve Average of Eastern Washington Trainload Rates.
H. Step Curve Average of Eastern Washington Trainload Rates.
I. Plain Curve Northern Pacific Eastern and Western Washington Single Car Rates.
J. Step Curve Northern Pacific Eastern and Western Washington Single Car Rates.
K. Plain Curve Great Northern Western Washington Single Car Rates.
L. Step Curve Great Northern Western Washington Single Car Rates.
M. Plain Curve Great Northern Eastern Washington Single Car Rates.
N. Step Curve Great Northern Eastern Washington Single Car Rates.
O. Plain Curve Chicago-Milwaukee Western Washington Single Car Rates.
P. Step Curve Chicago-Milwaukee Western Washington Single Car Rates.
Q. Plain Curve Chicago-Milwaukee Eastern Washington Single Car Rates.
R. Step Curve Chicago-Milwaukee Eastern Washington Single Car Rates.

Rates C and D represent almost exactly the same curves as would have been obtained had the trainload rates of each carrier been considered separately. It sho
The rates shown on the plain curves represent the rates found on the curves just above the right hand distance shown under the tables of miles. The step curv

*Figures in column Y illegible.

ASSOCIATED LOG SHIPPERS' EXHIBIT No. 5

DPW-5159. ALS-DN. HLG-506

Stepped Curves of Washington Log Rates in Effect Prior to August 26, 1920

J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
$1.16	$1.12	$1.20	$1.26	$1.34	$1.23	$1.28	$1.22	$1.26	$1.05	$1.18	$1.13	$1.18	$1.25	$1.00	$1.*
1.16	1.29	1.20	1.42	1.34	1.34	1.28	1.29	1.26	1.31	1.18	1.23	1.18	1.25	1.12½	1.
1.35	1.46	1.37	1.58	1.50	1.45	1.40	1.37	1.33	1.49	1.40	1.31	1.27	1.56½	1.25	1.
1.55	1.63	1.54	1.74	1.66	1.55	1.51	1.44	1.40	1.64	1.56	1.41	1.36	1.69	1.37½	1.
1.74	1.80	1.72	1.90	1.82	1.66	1.61	1.51	1.47	1.76	1.70	1.50	1.46	1.75	1.50	1.
1.94	1.97	1.88	2.06	1.98	1.76	1.71	1.59	1.55	1.87	1.81	1.59	1.55	1.81½	1.56½	1.
2.13	2.10	2.03	2.22	2.14	1.86	1.81	1.66	1.63	1.94	1.90	1.68	1.63	1.87½	1.62⅞	1.
2.33	2.19	2.14	2.38	2.30	1.96	1.91	1.73	1.69	2.02	1.98	1.77	1.72	1.94	1.69	1.
2.52	2.28	2.23	2.54	2.46	2.07	2.01	1.80	1.77	2.09	2.05	1.86	1.81	2.00	1.75	1.
2.72	2.35	2.31	2.70	2.62	2.16	2.11	1.88	1.84	2.14	2.11	1.95	1.90	2.06½	.....	1.
2.91	....	....	2.84	2.77	2.25	2.20	1.96	1.92	2.18	2.16	2.05	2.00	2.12½	.....	.....
3.10	....	....	2.97	2.90	2.31	2.28	2.03	2.00	2.22	2.20	2.14	2.09	2.19	.....	.....
3.29	....	....	3.07	3.02	2.37	2.34	2.10	2.06	2.24	2.23	2.23	2.18	2.25	.....	.....
3.49	....	....	3.15	3.11	2.42	2.39	2.18	2.14	2.27	2.25	2.32	2.27	2.31½	.....	.....
3.68	....	....	3.22	3.18	2.46	2.44	2.25	2.21	2.30	2.28	2.41	2.36	2.37½	.....	.....
3.88	....	....	3.29	3.25	2.50	2.48	2.32	2.28	2.33	2.31	2.50	2.45	2.44	.....	.....
....	....	....	3.34	3.32	2.53	2.51	2.40	2.36	2.36	2.34	2.58	2.54	2.50	.....	.....
....	....	....	3.39	3.37	2.56	2.55	2.47	2.43	2.38	2.37	2.67	2.63	2.56½	.....	.....
....	....	....	3.43	3.41	2.59	2.57	2.55	2.51	....	....	2.74	2.70	2.62½	.....	.....
....	....	....	3.47	3.45	2.63	2.61	2.62	2.60	....	....	2.82	2.78	2.62½	.....	.....
....	....	....	3.54	3.48	2.70	2.66	2.71	2.66	....	....	2.93	2.87	2.69	.....	.....
....	....	....	3.58	3.56	2.77	2.73	2.79	2.75	....	....	3.02	2.97	2.75	.....	.....
....	....	....	3.62	3.60	2.83	2.80	2.85	2.82	....	....	3.06	3.04	2.81½	.....	.....
....	....	....	3.65	3.63	2.91	2.87	....	....	....	....	....	....	2.87½	.....	.....
....	....	....	....	....	2.98	2.94	....	....	....	....	....	....	2.94	.....	.....
....	....	....	....	....	3.05	3.01	....	....	....	....	....	....	.....	.....	.....
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p Curve Great Northern Western Washington Single Car
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S. Plain Curve Oregon Washington Western Washington Single Car Rates.

T. Step Curve Oregon-Washington Western Washington Single Car Rates.

U. Plain Curve Oregon-Washington Eastern Washington Single Car Rates.

V. Step Curve Oregon-Washington Eastern Washington Single Car Rates.

W. Northern Pacific Distance Tariff.

X. Chicago-Milwaukee, Tacoma Eastern Distance Tariff.

Y. Chicago-Milwaukee, Bellingham Northern Distance Tariff.

ad rates of each carrier been considered separately. It should also be noted that Rate W is the same as the Chicago-Milwaukee, Idaho Distance Tariff.
d distance shown under the tables of miles. The step curve rates were found by averaging the plain curve rates.

[fol. 196-4] ASSOCIATED LOG SHIPPERS EXHIBIT No. 3-A

DPW-5159. ALS-DP. HLG-506

Comparative Freight Operating Expense, System and State, 1920

The 1920 Operating Costs per 1,000 Gross Ton Miles were as follows:

	Entire system	State of Washington
Northern Pacific	$4.23	$5.51
Great Northern	4.48	7.13
Chicago-Milwaukee	4.55	6.11
Oregon-Washington	5.43	6.61
Weighted Average	$4.48	$6.15

In every case, Gross Ton Miles were arrived at by multiplying Loaded and Empty Car Miles by 19, and adding Net Ton Miles to product.

State figures for Great Northern were estimated on basis of 1919 returns.

(Here follows Associated Log Shippers' Exhibit No. 5, marked side folio page 196-5)

[fol. 196a] STATEMENT RE REVISED EXHIBITS

These exhibits were compiled by Henry L. Gray, member American Society of Civil Engineers, member American Institute of Electrical Engineers, 840 Henry Building, Seattle, Washington.

[fol. 196a-1] Analysis of Associated Log Shippers Exhibits

Revised Exhibit One was prepared for the purpose of demonstrating that the freight transportation revenue obtained by the four principal carriers within the state of Washington, per unit of 1,000 net ton miles, is greater than the corresponding revenue earned upon the several systems as a whole. This is clearly shown by the the figures given for 1919 and 1920. In other words, it cannot be said that the state of Washington is not providing its pro rata portion of the total freight revenue. Incidentally, this exhibit, used in connection with Revised Exhibit 2, shows that the 1920 unit revenue from log traffic, or the revenue per 1,000 net ton miles, is considerably greater than the average unit revenue earned within the state. The comparison is as follows:

Revenue per 1,000 Net Ton Miles

	Total traffic	Log traffic
N. P.	$12.26	$12.79
G. N.	12.41	17.02
C. M.	9.92	17.06
O. W.	13.28	24.74
Combined	$11.97	15.07

[fol. 196a-2] Revised Exhibit 2 relates solely to intrastate log traffic as handled within the state of Washington by the four principal carriers during 1920. In brief, it shows the average loading to have been 7,462 board feet, or somewhat in excess of the ordinary minimum of 7,000 feet. It shows the average haul to have been 27.42 miles, and the average revenue per 1,000 net ton miles to have been $15.07. The Northern Pacific received the smallest unit revenue, that of the Great Northern the next, the Chicago-Milwaukee being third, while the Oregon-Washington received a unit revenue considerably in excess of the average. It will be noticed that the Oregon-Washington had an average haul per loaded car of less than one-half that of the Northern Pacific, and yet its revenue per loaded car was about the same as that of the Northern Pacific.

Revised Exhibit 3 was compiled for the purpose of ascertaining just how the 1920 unit revenue from log traffic compared with the unit revenue from other intrastate traffic, as well as from interstate traffic, and from the state traffic as a whole. In general, it was found that the revenue per 1,000 net ton miles of interstate freight other than logs was in excess of the corresponding revenue from the log traffic; the log traffic revenue, however, being greater than the unit revenue from all traffic. But in the case of the Oregon-Washington, the unit revenue from log traffic was somewhat in excess of the unit revenue from other intrastate traffic. It should be [fol. 196a-3] noted that the relations shown between revenues depend altogether upon the relation between intrastate and interstate ton miles within the state. The ton miles, intrastate and interstate, as reported by the carriers, are so widely at variance with the corresponding figures found by the Railroad Commission in its investigation of 1906, as to suggest that one of the two sets of figures may be incorrect.

Revised Exhibit 3-A shows that the unit operating expenses charged to the state of Washington in 1920 by the four principal carriers were considerably greater than the corresponding unit expenses for their systems as a whole; the cost of operation charged to Washington by the combined carriers being $6.09 per 1,000 gross ton miles, while the corresponding figure for the combined systems was only $4.48 per 1,000 gross ton miles. In other words, the operating expenses allocated to the state of Washington are 36 per cent in excess of the average unit expenses for the combined systems, or 43 per cent in excess of the average unit expenses of all parts of the combined systems other than the state of Washington.

[fol. 196a-6]

ASSOCIATED LOG SHIPPERS' REVISED EXHIBIT No. 1

DPW-5159. ALS-DH. HLG-506

Comparative Unit Revenues from Freight Traffic, 1919 and 1920, System and State

Compiled from Carriers' Annual Reports

	Northern Pacific		Great Northern		Chicago Milwaukee		Oregon Washington		Combined lines	
	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
Freight Transportation Revenue per 1,000 Revenue Net Ton Miles, System	$9.62	$10.32	$9.70	$10.53	$9.24	$10.31	$11.92	$12.23	$9.62	$10.47
Freight Transportation Revenue per 1,000 Revenue Net Ton Miles, State	10.85	12.26	10.83	12.41	9.48	9.92	13.78	13.28	10.84	11.97
Total Freight Service Revenue per 1,000 Revenue Net Ton Miles, System	9.85	10.57	9.91	10.72	9.62	10.58	12.21	12.16	9.91	10.72
Total Freight Service Revenue per 1,000 Revenue Net Tons Miles, State	11.42	12.75	11.18	12.69	9.88	10.14	14.42	13.72	11.32	12.34

Freight Transportation Revenue is that shown in Account 101. Total Freight Service Revenue covers Accounts 101, 110, 112, 135, 137, 139 and 140.

As the state expenses shown by the carriers are used by them to demonstrate the unprofitableness of the log traffic, it seems advisable for the Department to give some thought to the question of the apportionment of operating costs.

Revised Exhibit 4 really tells the story. From this exhibit it is seen that had the unit cost of hauling logs within the state during [fol. 196a-4] 1920 been no greater than the unit cost of hauling all products within the state, or $6.090 per 1,000 gross ton miles, then the log traffic would have yielded a profit, while all other traffic would have been carried at a tremendous loss. From this exhibit it will be noted that during 1920, the carriers as a whole operated at a freight operating cost of $52,308,268, the corresponding revenue (excluding all incidental revenue) having been only $43,884,320; so that apparently the 1920 freight operations within the state of Washington were conducted at a loss of $8,423,948, or a loss of approximately $0.981 per 1,000 gross ton miles.

In other words, if during the year 1920 the unit cost of handling log traffic was 45.8 per cent in excess of the average unit cost of handling all traffic within the state, then the log traffic was exactly on a par with the total traffic within the state, and earned or lost at exactly the same rate. If the unit cost of handling log traffic was less than 45.8 per cent of the average unit cost of handling all traffic within the state, then the log traffic was the more profitable; and if the unit cost of handling log traffic was more than 45.8 per cent of the unit cost of handling other traffic, then the log traffic was less profitable than the other traffic in the state. So that when dealing with the four carriers as a whole, the correct answer to the question as to whether or not the log traffic is more or less profitable than other traffic depends entirely upon whether or not the cost of [fol. 196a-5] hauling logs is greater or less than 146 per cent of the average unit cost of hauling all commodities within the state.

Exhibit 5 contains a series of log rate schedules, compiled from the Department's Exhibit 1. It is interesting in that it shows the general tendency of each of the several rates. It has not been revised, and is not inserted here. It should be accompanied by Exhibit 6, which is a blue print diagram showing in general the manner of deriving the rates shown in Exhibit 5.

Exhibit 7 is a new exhibit, not having been introduced at the previous hearing. It was compiled from data furnished by the log shippers, and covers approximately one-half of the rail shipments within the state. It is unfortunate that in many instances large shippers holding contracts failed to supply the information desired, with which the exhibit could have been made quite complete; but as the exhibit covers approximately one-half of the total shipments within the state during 1920, which called for freight bills of more than $2,000,000, it should be sufficiently representative. This exhibit speaks for itself, and probably will be commented upon in the direct testimony.

(Here follows Associated Log Shippers' Revised Exhibit No. 1, marked side folio page 196a-6.

[fol. 196a–7]

ASSOCIATED LOG SHIPPERS' REVISED EXHIBIT No. 2

DPW-5159. ALS-DI. HLG-506

Intrastate Log Traffic Statistics, State of Washington, 1920

	Northern Pacific	Great Northern	Chicago Milwaukee	Oregon-Washington	Grand total
1. Number of Loaded Cars...	101,725	21,483	84,848	15,892	223,948
2. Total M. Board Feet Hauled	782,739	140,389	618,749	129,311	1,671,188
3. Total Net Tonnage.....	3,258,152	584,369	2,539,962	536,641	6,919,124
4. Total Loaded Car Miles...	3,192,595	687,969	2,020,568	238,702	6,139,834
5. Total Freight Bill.....	$1,308,875	$318,490	$1,032,357	$199,450	$2,859,172
6. Board Feet per Loaded Car	7,695	6,535	7,292	8,137	7,462
7. Net Tons per Loaded Car..	32.03	27.20	29.94	33.77	30.89
8. Average Haul per Loaded Car	31.38	32.02	23.81	15.02	27.42
9. Straight Average of Loaded Hauls	35.82	35.09	28.51	18.96	29.59
10. Revenue per Loaded Car..	$12.88	$14.83	$12.17	$12.55	$12.77
11. Revenue per M. Board Feet	$1.672	$2.269	$1.668	$1.542	$1.711
12. Revenue per Loaded Car Mile	$0.40997	$0.46294	$0.51090	$0.83556	$0.46567
13. Revenue per Net Ton Mile	$0.01279	$0.01702	$0.01706	$0.02474	$0.01507

All statistics shown were taken directly from exhibits or reports filed by the carriers, or were obtained by additions, subtractions, multiplications, or divisions of such figures.

[fol. 196a–8]

ASSOCIATED LOG SHIPPERS' REVISED EXHIBIT NO. 3

DPW-5159. ALS-DK. HLG-506

Comparative Freight Revenues, Logs and Other Commodities, State of Washington, 1920

	Northern Pacific	Great Northern	Chicago Milwaukee	Oregon-Washington	Grand total
1. Total Revenue from Transportation of Intrastate Freight, other than Logs	$7,484,094	$3,313,385	$1,985,530	$1,164,420	$13,947,429
2. Total Revenue from Transportation of Intrastate Log Shipment	$1,308,875	$318,490	$1,032,357	$199,450	$2,859,172
3. Total Revenue from Transportation of Intrastate Freight	$8,792,969	$3,631,875	$3,017,887	$1,363,870	$16,806,601
4. Total Revenue from Transportation of Interstate Freight	$11,322,784	$6,544,201	$4,347,895	$4,862,840	$27,077,720
5. Total Revenue from Transportation of Freight, other than Intrastate Logs	$18,806,878	$9,857,586	$6,333,425	$6,027,260	$41,025,149
6. Revenue Ton Miles of Intrastate Freight other than Logs	350,493,855	131,728,571	83,980,466	55,325,562	621,528,454
7. Revenue Ton Miles, Intrastate Log Shipments	102,290,904	18,712,757	60,455,454	8,060,967	189,520,082

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Comparative Freight Revenues—Continued

	Northern Pacific	Great Northern	Chicago Milwaukee	Oregon-Washington	Grand total
8. Revenue Ton Miles, Total Intrastate Freight	452,784,759	150,441,328	144,435,920	63,386,529	811,048,536
9. Revenue Ton Miles, Total Interstate Freight	1,186,576,969	668,510,918	598,424,072	406,081,414	2,859,593,373
10. Revenue Ton Miles, All Freight other than Intrastate Logs	1,537,070,824	800,239,489	682,404,538	461,406,976	3,481,121,827
11. Revenue per 1,000 Ton Miles of Intrastate Freight, other than Logs	$21.35	$25.18	$23.64	$21.05	$22.42
12. Revenue per 1,000 Ton Miles of Intrastate Log Shipments	$12.80	$17.00	$17.08	$24.74	$15.09
13. Revenue per 1,000 Ton Miles of Intrastate Freight	$19.42	$24.18	$20.89	$21.52	$20.72
14. Revenue per 1,000 Ton Miles of Interstate Freight	$9.54	$9.79	$7.27	$11.98	$9.47
15. Revenue per 1,000 Ton Miles of all Freight other than Intrastate Logs	$12.24	$12.32	$9.28	$13.06	$11.78

ASSOCIATED LOG SHIPPERS' REVISED EXHIBIT NO. 4

DPW-5159. ALS-DM. HLG-506

Comparative Financial Results, Log Traffic and Other Freight Traffic, State of Washington, 1920

	Northern Pacific	Great Northern	Chicago Milwaukee	Oregon Washington	Grand total
1. Cost of Freight Operation	$21,282,037	$13,220,797	$10,821,922	$6,983,512	$52,308,268
2. Total Freight Car Miles, Loaded and Empty	97,587,862	50,877,314	47,743,436	27,373,686	223,582,298
3. Total Tare Ton Miles	1,854,169,378	966,668,966	907,125,284	520,100,034	4,248,063,662
4. Total Net Ton Miles	2,009,495,141	930,074,312	865,474,809	536,470,034	4,341,514,296
5. Total Gross Ton Miles	3,863,664,519	1,896,743,278	1,772,600,093	1,056,570,068	8,589,577,958
6. Freight Operating Cost, M. Gross Ton Miles	$5.508	$6.970	$6.105	$6.609	$6.090
7. Log Car Miles, Loaded and Empty	6,385,190	1,375,938	4,041,136	477,404	12,279,668
8. Tare Ton Miles, Log Cars	89,392,660	19,263,132	56,575,904	6,683,656	171,915,352
9. Net Ton Miles, Logs	102,290,904	18,712,757	60,455,454	8,060,967	189,520,082
10. Gross Ton Miles, Log Traffic	191,683,564	37,975,889	117,031,358	14,744,623	361,435,434
11. Cost of Operation, Log Traffic	$1,055,297	$264,703	$714,474	$97,447	$2,131,921
12. Revenue from Logs, Gross	$1,308,875	$318,490	$1,032,357	$199,450	$2,859,172
13. Revenue from Logs, Net	$253,578	$53,787	$317,883	$102,003	$727,251
14. Revenue from Other Freight, Net	$1,419,362*	$3,098,508*	$3,774,023*	$858,805*	$9,150,698*
15. Incidental Freight Revenue	$802,616	$216,396	$183,730	$214,086	$1,416,828

*Denotes Red Figures.

The Total Tare Ton Miles shown on line 3 were found by multiplying the figures shown in line 2 by 19 Tons.

The Log Car Tare Ton Miles shown on line 8 were found by multiplying the figures shown on line 7 by 14 Tons.

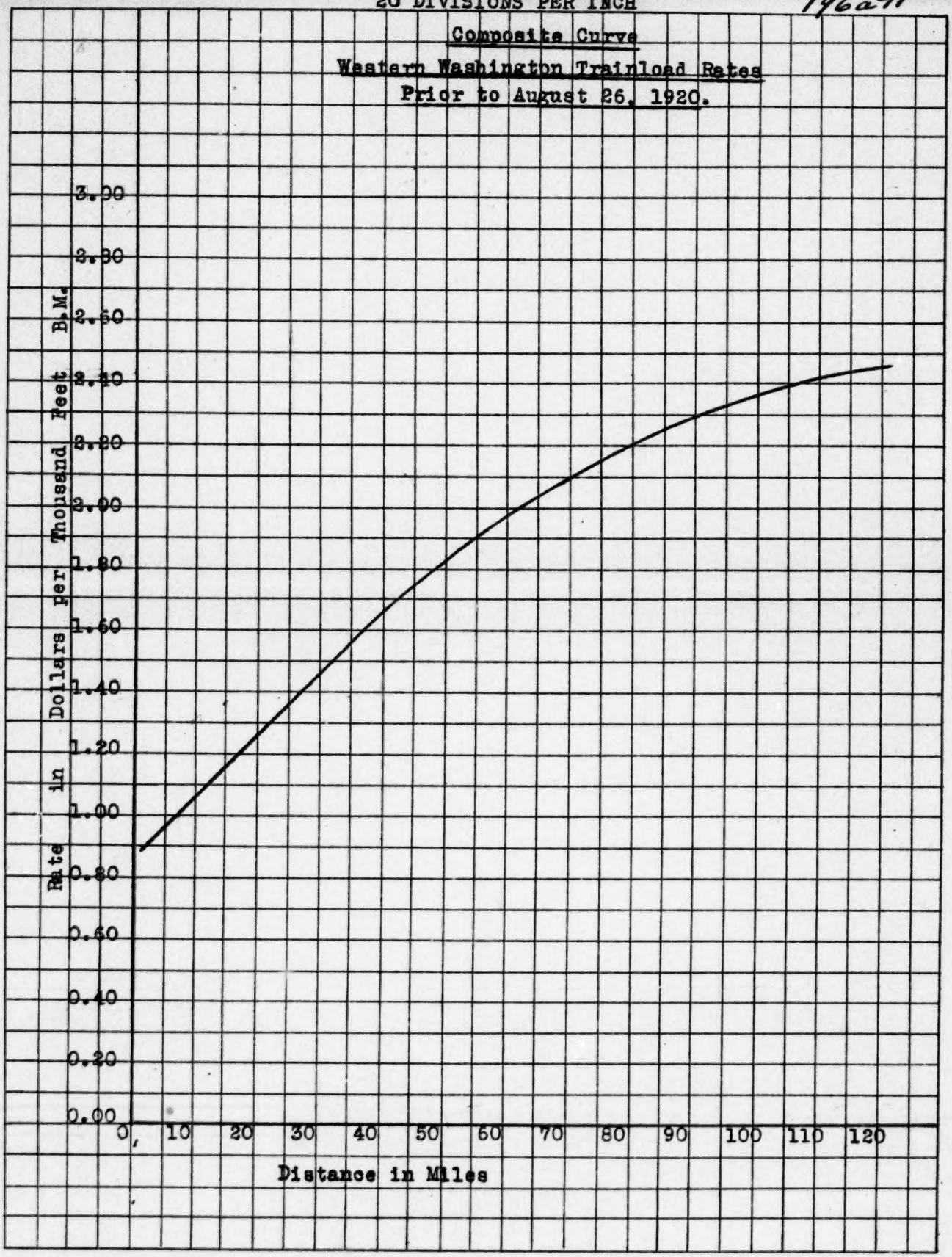
The figures shown in line 14 represent the difference between the total of Account 101 (exclusive of Log Traffic Earnings), and the Total Freight Operating Cost (less that part assigned to Log Traffic on line 11).

Line 15 shows the total of Accounts 110, 112, 135, 137 and 140. A portion of this revenue should be credited to the Log Traffic.

In brief, this table shows that during 1920, had the cost of hauling logs been the average cost of $6.090 per 1,000 Gross Ton Miles, the four principal carriers would have made a profit over total operation from State Log Traffic of at least $727,251; and at the same time would have sustained a corresponding loss of at least $7,733,870 (14-15) on all other freight traffic handled in the State.

ASSOCIATED LOG SHIPPERS, EXHIBIT No. 6
20 DIVISIONS PER INCH

196a-11



[fol. 196a-9] ASSOCIATED LOG SHIPPERS' REVISED EXHIBIT No. 3-A

DPW-5159. ALS-DP. HLG-506

Comparative Freight Operating Expense, System and State, 1920

The 1920 Operating Costs per 1,000 Gross Ton Miles were as follows:

	Entire system	State of Washington
Northern Pacific	$4.23	$5.51
Great Northern	4.48	6.97
Chicago-Milwaukee	4.55	6.11
Oregon-Washington	5.43	6.61
Weighted Average	$4.48	$6.09

In every case, Gross Ton Miles were arrived at by multiplying Loaded and Empty Car Miles by 19, and adding Net Ton Miles to product.

(Here follow Associated Log Shippers' Exhibits Nos. 4 and 6, marked side folio pages 196a-10 and 196a-11)

[fol. 196a-12] ASSOCIATED LOG SHIPPERS' EXHIBIT No. 7

DPW-5159. ALS-DL. HLG-506.

Information from Loggers

General Information:

Number of Concerns Reporting	33
Replies Recapitulated	28
Replies for Year 1919 Recapped	13
Replies for Year 1920 Recapped	28
Board Feet Shipped, 1919	456,390,257
Board Feet Shipped, 1920	852,639,771
Board Feet Shipped, 1919 and 1920	1,309,030,028
Cars Shipped, 1919	62,084
Cars Shipped, 1920	113,810
Cars Shipped, 1919 and 1920	175,894
Freight Bills, 1919	$735,425
Freight Bills, 1920	$1,456,302
Freight Bills, 1919 and 1920	$2,191,727
Average Board Feet per Car, 1919	7,351
Average Board Feet per Car, 1920	7,492
Average Board Feet per Car, 1919 and 1920	7,442
Straight Average Haul, Miles,	29.46
Loaded Car Miles, 1919	2,151,306
Loaded Car Miles, 1920	3,220,358
Freight per Loaded Car, 1919	$11.85
Freight per Loaded Car, 1920	$12.79
Freight per M. Board Feet, 1919	$1.611
Freight per M. Board Feet, 1920	$1.708
Freight per Loaded Car Mile, 1919	$0.3419
Freight per Loaded Car Mile, 1920	$0.4522
Freight per Ton Mile, 1919	$0.01119
Freight per Ton Mile, 1920	$0.01455
Average Loaded Car Haul, 1919, Miles	34.65
Average Loaded Car Haul, 1920, Miles	28.30

Comparison, Railroad and Selling Scales:

Specified Instance Reported, Number	28
Total Railroad Scale	802,937,347
Total Selling Scale	755,138,586
Excess Railroad Scale	47,798,761
Per Cent of Railroad Scale Excess	6.33

[fol. 196a-13] Excess Freight Paid, due to Minimum:

Specific Instances Reported, Number	32
Excess Freight per M. Board Ft. Minimum	$0.0000
Excess Freight per M. Board Ft. Maximum	$0.4489
Board Feet Shipped	991,849,177
Number Cars Shipped	134,922
Total Freight Bill	$1,702,564
Excess Freight Paid, Total	$104,075
Excess Freight per Car, Average	$0.77
Excess Freight per M. Average	$0.105
Per Cent Excess Freight in Total Bill	6.12

Damages Paid Carriers:

Specific Instances Reported, Number	35
Number Reporting No Damages Paid	11
Maximum Damage Reported per M	$0.143
Board Feet Shipped	1,139,278,362
Number Cars Shipped	153,596
Total Damage Paid	$27,799
Damage per Car, Average	$1.182
Damage per M. Average	$0.0246

In no instance does any figure shown relating to freight paid include the War Tax.

[fol. 196b] Associated Log Shippers' Exhibit No. 7-A

These notes were compiled by Henry L. Gray, member American Society of Civil Engineers, member American Institute of Electrical Engineers, 840 Henry Building, Seattle, Washington.

[fol. 196b-1] Importance of Case

According to the 1920 Directory of the Logging Industry of the Pacific Coast, during 1920 there were 283 concerns engaged in logging in the state of Washington, and of these, 251 had their headquarters west of the Cascade Mountains. At the present time there are 58 logging concerns operating within the state that ship logs over common carrier railways, and of these, 55 have their headquarters west of the Cascades.

It is estimated that during the year 1920 there were 62,000 men in the state of Washington employed in connection with the marketing of saw and finished forest products, while a large number of other persons were engaged in occupations closely associated with, and which were supported largely by the lumber and timber business. The 1919 payroll of the lumber and timber industry within the state, as shown by the records of the Industrial Insurance Commission, was $88,529,942. It is frequently stated that one person

in every five in the state of Washington is indebted wholly or in part to the lumber and timber business for his livelihood.

The state of Washington is the heaviest lumber producing state of the Union, cutting approximately 15 per cent of the total lumber [fol. 196b-2] manufactured, and approximately 80 per cent of the total shingles manufactured in the United States. At the present time, approximately 30 per cent of the forest timber converted into lumber, and approximately 25 per cent of the forest timber converted into shingles is hauled to mills or tide water over lines of common carrier railways. As the timber is being gradually cut back from streams and other bodies of water, it is possible that the volume of log traffic handled by carriers will increase.

At the present time, approximately 1,715,000,000 board feet of logs, or 7,100,000 tons, or 230,000 cars, are handled annually by common carriers within the state. During the year 1920 there were delivered to the four transcontinental carriers serving Washington at points within the state of Washington, approximately 21,000,000 tons of revenue freight, of which approximately 13,000,000 tons, or 62 per cent, were raw and manufactured forest products; and of which approximately 7,000,000 tons, or 33 per cent of all revenue freight, were logs. Also, the log haul rates are of vital importance to the lumber industry which supplies the carriers with approximately 65 per cent of interstate traffic from this state. It is probable that this is by far the most important rate case ever heard by the Department of Public Works, or its predecessors.

[fol. 196b-3] Haul of Finished Product

The contention is sometimes made that the carriers, after transporting logs to mills at low rates, are deprived through water competition of the corresponding outgoing shipment of the finished product. There is nothing to this contention, and in fact the contrary is true, for the number of board feet of finished product hauled out by the rail carriers considerably exceeds the number of board feet hauled in by the same carriers in the form of logs. This will be clear from the following discussion:

During the year 1920, the logs hauled by rail within the State of Washington by the four principal carriers aggregated 1,671,188,000 board feet, or 6,919,124 tons. In order to allow for the logs handled by smaller common carriers which might expect to handle the finished product, as well as to allow for certain interstate shipments, let it be considered that 180,876 tons additional should be included, making a total estimated log tonnage hauled within the state in 1920 by rail common carriers other than logging roads, of 7,100,000 tons, or 1,714,874,000 board feet.

Of the total tonnage, approximately 20 per cent were cedar logs, of which approximately 80 per cent were converted into shingles, the remaining 20 per cent being manufactured into cedar lumber; [fol. 196b-4] so that the logs hauled into the mills by rail were used about as follows:

Use	Per cent	Board feet
For Lumber	84	1,440,494,160
For Shingles	16	274,379,840
		1,714,874,000

The statistics compiled by the United States Forest Service for the year 1920 show the lumber manufactured within the state of Washington during that year to have been 5,524,676,000 board feet, the sales having been 5,197,470,000 board feet, of which 385,571,000 board feet were retailed from the mills; 846,397,000 board feet having been shipped by water, while the remaining 4,292,708,000 board feet were shipped by rail to all parts of the country. However, there seems to be some doubt as to the correctness of the water shipments shown by the Forest Service, for the reason that the Pacific Coast Lumber Inspection Bureau, which inspects all cargo shipments, shows a total water shipment from Washington ports during 1920 of 1,016,812,739 board feet. Owing to the fact that there seems to be a constant difference between the figures compiled by the Forest Service and the corresponding figures compiled by the Pacific Coast Inspection Bureau, it seems fair to consider the cargo shipments for 1920 as being a mean of the two, or 931,604,867 board feet, or a greater water shipment than during any preceding year for which the writer has records. Therefore the rail shipments of lumber [fol. 196b-5] within and from the state of Washington during the year 1920 were 3,880,294,125 board feet, while the logs transported to mills by rail for the purpose of being manufactured into lumber contained a total of 1,440,494,160 board feet; so that for every board foot of logs hauled into the mills by rail for the manufacture of lumber, 2.69 board feet were hauled out from the mill by rail as a finished product. So much for lumber.

During the year 1920, the Forest Service statistics show that the Washington mills manufactured 4,847,105,000 shingles, the sales being somewhat in excess of this, or 4,916,752,000 shingles. Of these, 70,366,000 shingles were retailed from the mills, while 136,414,000 shingles were shipped by water, leaving a total of 4,709,972,000 shingles carried by rail within and from the state of Washington during the year 1920. On the basis of the ratio of 9 to 1, these shingles corresponded to 523,330,222 board feet. The estimated footage of cedar logs hauled into the mills by rail for the purpose of manufacture into shingles was previously shown to be 274,379,840 board feet; so that for every shingle hauled into the mills by rail in the form of logs, 1.91 shingles were hauled out as a finished product.

It is possible that the exact ratios between raw material and finished product handled by rail, as shown for lumber and shingles, may differ somewhat from the actual ratios, could the same be ascertained; but it is certain that they are sufficiently correct for all [fol. 196b-6] practical purposes. By taking lumber and shingles combined, it is seen that the total shipment of finished product by rail amounted to 4,403,624,327 board feet; whereas, the correspond-

ing in-put by rail in form of logs was only 1,714,874,000 board feet. Therefore, considering lumber and shingles together, for every board foot hauled in by rail in the form of logs, 2.57 board feet were hauled out by rail as finished product. This effectually disposes of the contention of the carriers that though they quote low rates for raw materials in the form of logs, they are deprived of the more profitable haul of the finished product, due to water competition.

The tables following may be of assistance to the Department. In their preparation, some approximations were necessary, but it is thought the figures are sufficiently correct for use.

[fol. 196b-7] Production of Lumber and Shingles, State of Washington

	Lumber, M ft. B. M.		Shingles, M pieces	
	Cut	Sold	Cut	Sold
1917	4,431,243	4,384,222	6,679,987	6,644,113*
1918	4,603,123	4,569,383	4,202,840	4,238,714
1919	4,836,507	4,800,233	6,133,000	5,703,353*
1920	5,524,676	5,197,470	4,487,105	4,916,752

*Estimated from 1918 and 1920.

All figures from U. S. Forest Service, except those marked with*.

[fol. 169b-8] Sales of Lumber and Shingles, State of Washington

	Lumber, M ft. B. M.	Shingles, M pieces	Shingles, M ft. B. M.
1917	4,384,222	6,644,987	738,332
1918	4,569,383	4,202,840	578,093
1919	4,800,233*	6,133,000*	681,444*
1920	5,197,470	4,916,752	546,306

In converting shingles into board sheet, a ratio of 9 to 1 was used.

All figures from U. S. Forest Service, except those marked with * which were estimated from best data available.

[fol. 196b-9] Water Shipments, Lumber and Shingles, State of Washington

	Lumber, ft., B. M.		Shingles, pieces,	Shingles,
	P. C. I. B.	U. S. F. S.	U. S. F. S.	ft., B. M.
1917	824,690,910	921,731,000	69,963,000	7,773,666
1918	638,193,544	798,232,000	67,[illegible]3,000	7,553,666
1919	787,377,766	814,935,988*	109,[illegible]1,000*	12,196,777*
1920	1,016,812,739	846,397,000	136,414,000	15,157,111

P. C. I. B.—Pacific Coast Inspection Bureau.
U. S. F. S.—United States Forest Service.

*Estimated from best data available.

[fol. 196b-10] Retail Sales from Mills, Lumber and Shingles, State of Washington

	Lumber, M ft., B. M.	Shingles, M pieces	Shingles, ft., B. M.
1917	459,218	124,427	13,825
1918	449,628	106,083	11,787
1919	480,023*	122,600*	13,622*
1920	385,571	70,366	7,818

All figures from U. S. Forest Service except those marked * .

[fol. 169b-11] Logs Hauled by Rail, State of Washington

	Lumber, logs, posts, cordwood, etc., hauled, tons	Per cent of logs therein	Tons of logs hauled by rail	Logs hauled by rail, M board feet
1917	9,523,000	55	5,230,000	1,262,000
1918	11,327,000	55	6,240,000	1,507,000
1919	12,298,000	55	6,760,000	1,631,000
1920	12,915,000	55	7,100,000	1,715,000

Owing to the fact that the information available concerning the log tonnage hauled in 1920 relates to the intrastate haul by the four principal carriers, it was necessary to make an addition in order to cover the interstate haul, as well as hauls by smaller carriers. Consequently, the figures for 1920, while very nearly correct, should be considered as close approximations only.

The hauls for 1917, 1918 and 1919, were derived from the tonnage shown in the carrier's annual reports, such tonnage covering lumber, logs, posts, cord wood, etc. This tonnage was subjected to certain revisions, and with the assumption that the log tonnage contained therein amounted to 55 per cent of the total (as was found from 1920 statistics), the tons of logs hauled by rail during each of these years were derived. These figures should be considered as approximately correct.

*Estimated.

[fol. 197] N. P. EXHIBIT No. 1

Comparison of Northern Pacific Railway Company Rates on Log Applying in Washington (West of Cascades), Minnesota, and Wisconsin

	Washington—distance, rates in cents per 1,000 ft., N. P. tariff 398-L, W. P. S. C. 1172, I. C. C. 6574	Minnesota — distance, rates in cents per 1,000 ft. (based on 10,000 lbs. per 1,000 feet, as provided in tariff), N. W. F. T. B. tariff 12-A, G. C. Wright's I. C. C. 15	Rates to Superior, Wisc., from specified points, in cents per 1,000 ft. (based on 10,000 lbs. per 1,000 feet, as provided in tariff), N. P. Ry. tariff 601-G, I. C. C. 6644
5.....	156½	200	250
10.....	156½	200	250
15.....	195½	200	250
20.....	211½	200	250
25.....	219	250	350
30.....	227	250	350
35.....	234½	250	350
40.....	242½	250	400
45.....	250	350	400
50.....	258	350	400
55.....	265½	350	400
60.....	274	400	450
65.....	281½	400	450
70.....	289½	400	450
75.....	297	400	450
80.....	305	450	450
85.....	312½	450	550
90.....	320½	450	550
95.....	328	450	550
100.....	328	550	550
105.....	336½	550	600
110.....	336½	550	600
115.....	344	550	600
120.....	344	550	700
125.....	352	600	700
130.....	352	600	700
135.....	359½	600	700
140.....	359½	600	...
145.....	367½	600	...
150.*....	367½	700	...

* Will also apply between points on the Minnesota and International Railway and the Big Fork and International Falls Railway.

Comparison of Canadian Pacific Railway Company's Log Rates Applying in British Columbia with Rates of the Northern Pacific Railway Applying Between Stations in Washington West of the Cascades

Canadian Pacific Railway Tariff W-4639, C. R. C. 2549

From—	To—	Miles	Special commodity rates applying where product is reshipped via Can. Pac. Ry. Single-car rate except as otherwise shown (rate in cents per 1,000 feet)	Distance schedule		Nor. Pacific rates shown in comparison for same distances (N. P. tariff 398-L, W. P. S. C. 1172, I. C. C. 6574)		
						Single-car distance rates		
				Miles	Rate (in cents per 100 lbs.) Can. Pac. Ry. Co.'s rates, tariff No. W-4639	In cents per 100 lbs. (Factor of 8,325 lbs. per 1,000 ft. used in converting rates)	In cents per 1,000 feet	10-car rates (other exhibit shows points of origin and destination)
Crescent Valley, B. C.	South Slocan, B. C.	3	170					
Clengs Spur, "	Brilliant, "	4	170					
Koseanices Spur, "	South Slocan, "	5	170					
Fife, "	Billings, "	6	170					
Mayock, "	Jaffray, "	9	210					
Kocks, "	South Slocan, "	9	170	10	5	1.9	156½	125
Passmore, "	South Slocan, "	11	210					
Pritchard, "	Chase, "	11	210					
Vallican, "	South Slocan, "	12	210					
Elko, "	Jaffray, "	13	210					
Jerome, "	Cranbrook, "	14	210					
Bull River, "	Wardner, "	15	210	15	5	2.3	195½	156½
Lebabdo, "	South Slocan, "	17	210					
Fife, "	Grand Forks, "	18	210					
Ducks, "	Chase, "	18	210					
Claybrick, "	South Slocan, "	19	210					
Winlaw, "	" " "	19	210					
Fenwick, "	Wardner, "	21	#210 (10-car rate)	20	5	2.5	211½	156½ to 180
" "	" "	21	250					
Rankins Spur, "	Wasa, "	21	#210					
Rampart, "	Jaffray, "	22	#210 (10-car rate)					
" "	" "	22	250					
Perrys, "	South Slocan, "	23	250	25	5	2.6	219	156½ to 187½
Lemon Creek, "	South Slocan, "	26	250					
Fort Steele, "	Wardner, "	29	#230 (10-car rate)					
" " "	" "	29	250	30	5½	2.7	227	164½ to 211½
Fort Steele, "	Jaffray, "	31	250					
Slocan City, "	South Slocan, "	31	290					
Bridges Spur, "	Jaffray, "	32	290					
Gerrard, "	Lardeau, "	33	290					
Bridges Spur, "	Wardner, "	33	#230 (10-car rate)					
" " "	" "	33	290					
Rizzuttis Spur, "	Fernie, "	33	290	35	6½	2.8	234½	195½
Fort Steele, "	Caithness, "	36	330					
Fassiferne, "	Jaffray, "	38	330					
Wasa, "	" "	40	#230 (10-car rate)					
" "	" "	40	330	40	8	2.9	242½	187½ to 203
Wasa, "	Wardner, "	41	#230 (10-car rate)	45	8	3	250	203 to 234½
Mileage 49, Lake Windermere Sub-Division	" "	49	#260	50	8½	3.1	258	234½
Skookumchuck, B. C.	Wardner, "	52	#230 (10-car rate)					
" "	" "	52	400					
McConnell, "	Cranbrook, "	55	400	55	9	3.2	265½	234½
Mileage 56.7 Lake Windermere Sub-Division	Wardner, "	57	#260					
Mileage 58, Lake Windermere Sub-Division	" "	58	#260					
Wasa, B. C.	Waldo, "	58	#400	60	9	3.3	274	No 10-car rates for 60 miles.

#Applies only where shipper furnishes equipment.

(It will be noted the Canadian Pacific does not furnish the equipment in connection with their 10-car rates and this also applies to a few of their single-car rates. The Northern Pacific in all cases furnishes the equipment used in transporting logs moving between N. P. stations in Washington.)

CHART

TOO

LARGE

FOR

FILMING

N. P. Exhibit No. 5

Statement Showing Comparison of Rates Applied on Logs Handled under a Transit Arrangement by Southern Railroads with Rates of the Northern Pacific Railway (Rates Shown are in Cents per 100 lbs. and Apply on Single-car Lots

Distance	‡ Yazoo & Mississippi Valley Railroad, tariff 222-B, tariff 602-H, I. C. C. 5567, I. C. C. 6048, applying in Louisiana and Mississippi		‡ St. Louis & Southwestern Railway, tariff 7015, I. C. C., 3665, applying in Arkansas, Louisiana and Missouri	‡Missouri Pacific R. R., tariff 2643,-X, I. C. C. A-4450 and 5023-R, I. C. C. A-4781, applying between stations in Arkansas and Louisiana		‡ Kansas City Southern Ry., tariffs 2346-C, 2390-G, 2650-C, 2489-F, I. C. C., Nos. 3914, 3921, 3912, 3918, 3309, applying to various milling points in Louisiana	‡ Gulf, Missouri & Northern Rd., Manufactures tariff No. 2, I. C. C., 928, applying from and to specified points in Alabama, Mississippi and Tennessee		‡ Illinois Central Railroad, tariff 220-C, I. C. C. No. 5557, applying between Southern Lines of the A. C. R.		†Northern Pacific Railway, tariff W. P. S. C. 398-L. Single car distance rates of Northern Pacific Ry., applying in Washington west of the Cascades. (An average of distance rates and special commodity rates would produce rates lower than those shown below.) Factor of 8352 lbs. per 1,000 ft. used in converting rates to weight basis
	See Note 1	See Note 2	* See Note 2	See Note 1	See Note 2	* See Note 2	See Note 1	See Note 2	See Note 1	See Note 2	
5 miles	5	2	3.5	5	3.5	4	7	4	4.5	2	1.9
10 "	5	2	3.5	5.5	3.5	4	7	4	5.5	2	1.9
15 "	5	2	3.5	7.5	3.5	4	7	4	6.5	2	2.3
20 "	5	2.5	3.5	7.5	3.5	4	7	4	7	2.5	2.5
25 "	5	2.5	3.5	7.5	3.5	4	7	4	7.5	2.5	2.6
30 "	6.5	3	4	7.5	4	4	9	5	8	3	2.7
35 "	6.5	4	4	9	4	4	9	5	9	4	2.8
40 "	6.5	4	4	9	4	4	9	5	9.5	4	2.9
45 "	6.5	4.5	4	9	4	4	9	5	10.5	4.5	3
50 "	6.5	5	4	9	4	4	9	5	11.5	5	3.1
55 "	7	5	5	9	5.5	5.5	11	6	12	5	3.2
60 "	7.5	5.5	5.5	9	5.5	5.5	11	6	12	5.5	3.3
65 "	7.5	5.5	5.5	9	5.5	5.5	11	6	12.5	5.5	3.4
70 "	7.5	5.5	5.5	9	5.5	5.5	11	6	12.5	5.5	3.5
75 "	7.5	6.5	5.5	9	5.5	5.5	11	6	13	6.5	3.6
80 "	7.5	6.5	6	10	6	6	11	7	13	6.5	3.7
85 "	8	6.5	6	10	6	6	12	7	14	6.5	3.8
90 "	8	7	6	10	6	6	12	7	14	7	3.8
95 "	8	7	6	10	6	6	12	7	14.5	7	3.9
100 "	8	7	6	10	6	6	12	7	14.5	7	3.9
105 "	8	7	7	12.5	7	7	13	8	15	7	4
110 "	8	7	7	12.5	7	7	13	8	15	7	4
115 "	8	7	7	12.5	7	7	13	8	15.5	7	4.1
120 "	8	7	7	12.5	7	7	13	8	15.5	7	4.1
125 "	9	8	7	12.5	7	7	13	8	16.5	8	4.2
130 "	9	8	7.5	12.5	7.5	7	13	8	16.5	8	4.2
135 "	9	8	7.5	12.5	7.5	7	13	8	17	8	4.3
140 "	9	8	7.5	12.5	7.5	7	13	8	17	8	4.3
145 "	9	8	7.5	12.5	7.5	7	13	8	17.5	8	4.4
150 "	9	8	7.5	12.5	7.5	7	13	8	17.5	8	4.4

Note 1.—Rates applying where transit privilege is not used.

Note 2.—These rates are applied only where the product from the inbound logs, in the proportion prescribed in transit tariffs, is reshipped via the line bringing the logs into transit station.

* Rates applicable where transit privilege not used are not available.

† Rates applicable between points in Louisiana. Figures for Arkansas not available.

‡ Where logs cannot be weighed in transit estimated weight of 10,000 lbs. per 1,000 ft. is applied on Pine.

Comparison of Log Rates of Southern Railway with Rates of the Northern Pacific Railway (the Southern Railroad has No Transit Arrangement on Logs)

Rates Shown in Cents per 100 lbs.

‡Southern Railroad lines log tariff No. 1, I. C. C. A-8610

xDistance	Interstate rates applying between specified points in Alabama, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee, single-car minimum 40,000 lbs.	Rates applying on pine logs between stations in Virginia, single car, minimum 40,000 lbs.				Rates applying on pine logs between stations in Tennessee, single-car minimum 40,000 lbs.	Alabama		Northern Pacific tariff 308-I, W. P. S. C. 1172, I. C. C. 6574, single-car distances, rates applying in Washington west of the Cascades. Factor of 8,325 lbs. per 1,000 ft. used in converting rates to weight basis. (General average of single-car and train-load rates would produce rates lower than those shown below.
		Interstate		Intrastate			Rates applying from points on Birmingham and Mobile divisions to Selma, Ala., single-car rate, minimum 40,000 lbs.	Rates applying from specified points to Mobile and other tidewater points, single-car rate, minimum 40,000 lbs.	
		(See note 1)	(See note 2)	(See note 3)	(See note 4)				
						Intrastate	Intrastate	Intrastate	
5 Miles.....	3	3½	3	2½	3½	2.9	3.1	5.	1.9
10 "	3	4	4	2½	3½	2.9	3.1	6.5	1.9
15 "	4	4	4	2½	4	3.1	3.5	6.5	2.3
20 "	4	5½	5	2½	4	3.1	3.5	6.5	2.5
25 "	4	5½	5	3	4	3.6	3.9	6.5	2.6
30 "	4	5½	5	3	4	3.6	3.9	6.5	2.7
35 "	4½	5½	5	4	5	3.9	4.4	6.5	2.8
40 "	4½	5½	5	4	5	3.9	4.4	6.5	2.9
45 "	5	5½	5	4	5½	4.4	4.8	6.5	3.
50 "	5	5½	5	4	5½	4.4	4.8	6.5	3.1
55 "	5	6½	5½	4½	5½	4.8	5.1	6.5	3.2
60 "	5	6½	5½	4½	5½	4.8	5.1	8.	3.3
65 "	5½	7	6½	5	6½	5.1	5.5	8.	3.4
70 "	5½	7	6½	5	6½	5.1	5.5	8.	3.5
75 "	5½	7½	7	5	6½	5.5	6.	8.	3.6
80 "	5½	7½	7	5	6½	5.5	6.	8.	3.7
85 "	6½	7½	7	5½	7	6.	6.3	9½	3.8
90 "	6½	7½	7	5½	7	6.	6.3	11.5	3.8
95 "	7	7½	7	5½	7½	6.3	6.7	11.5	3.9
100 "	7	7½	7	5½	7½	6.3	6.7	12.5	3.9
105 "	7	9	8	6½	7½	6.7	7.	12.5	4.
110 "	7	9	8	6½	7½	6.7	7.	12.5	4.
115 "	7½	9	8	7	8½	7.	7.5	12.5	4.1
120 "	7½	9	8	7	8½	7.	7.5	12.5	4.1
125 "	8	10	9	7½	9	7.5	7.9	12.5	4.2
130 "	8	10	9	7½	9	7.5	7.9	14.5	4.2
135 "	8	10	9	8	9	7.9	8.3	14.5	4.3
140 "	8	10	9	8	9	7.9	8.3	14.5	4.3
145 "	9	10½	9½	8	10	8.2	8.6	14.5	4.4
150 "	9	10½	9½	8	10	8.2	8.6	14.5	4.4

NOTE 1.—Applies between stations Roanoke and North.
NOTE 2.— " " " South of Roanoke.
NOTE 3.— " " " on the Sou. R'd's Norfolk Division. These rates were fixed by legislation.
NOTE 4.— " " " Roanoke and were fixed by legislation.

‡Southern Railroad provide estimated weight of 40,000 lbs. per 1,000 ft. (Rules and Regulations tariff No. 2, I. C. C. A-8844), to be used where actual weight cannot be ascertained at point of shipment in transit or at destination.
ʃThis is known as the Pierpont scale and fixed by the Interstate Commerce Commission in docket 9134 (50 I. C. C. 81), decided in May, 1918.
xRates do not apply to tidewater points.

N. P. Exhibit No. 2

Comparison Northern Pacific Railway Company's Rates Applying in Washington West of the Cascades with Rates of Short Lines Operating in This Territory (Rates in Cents per 1,000 feet)

Distance	Northern Pacific Tariff 389-L, I. C. C. 6574, W. S. C. 1172			Western Pine Lumber Co. Tariff F-1, I. C. C. No. 1, W. P. S. C. No. 2 (operating between Plateau, Wash., and Klickitat, Wash.), single-car rate	Lewis and Clark Railway Co. tariff No. 1, P. S. C. O. No. 1 (terminus, Tongue Point, Ore.), single-car rate	Puget Sound & Cascade Ry. Co. tariff 1-B, W. P. S. C. No. 15, I. C. C. No. 9 (operating between Potts, Wash., and North Mt. Vernon, Wash.) single-car rate
	Single-car rate	10-car rate	15-car rate			
5 miles	*156½	*125		†250	†225	*212½
110 "	*156½	*125		†250	†225	*237½
15 "	*195½	*156½	*140½	†250	†250	*237½
16 "	*211½	*156½ *180	*156½		†250	*250
18 "	*211½	*156½ to *180	*156½		†280	*250
20 "	*211½	*156½ to *180	*156½			*250
25 "	*219	*156½ to *187½				*250

*Carrier furnishes the equipment
†Shipper furnishes the equipment

(Here follow N. P. Exhibits Nos. 3, 4, 5, and 6, marked side folio pages 199-204, inc.)

[fol. 205]

N. P. Exhibit No. 7

Statement Showing Average Weight of Logs per 1,000 Feet Secured by Weighing 300 Cars at Representative Points West of the Cascade

District	Kind of logs	Number of cars	Total net weight	Total scale	Average weight per 1,000 feet
Grays Harbor....	Spruce	26	1,679,440 lbs.	233,390 feet	7,196 lbs.
" "	Fir	16	1,088,240 "	140,000 "	7,773 "
" "	Hemlock	1	78,320 "	7,390 "	10,598 "
" "	Mixed Fir and Cedar.....	44	3,183,680 "	385,650 "	8,255 "
" "	Mixed Spruce, Fir and Cedar.....	20	1,371,260 "	177,150 "	7,155 "
" "	Mixed Spruce and Hemlock.....	6	414,900 "	46,570 "	8,909 "
Centralia	Fir	16	1,088,780 "	136,740 "	7,962 "
Tacoma	"	13	984,040 "	120,477 "	8,168 "
"	Mixed Fir with small percentage Hemlock	23	1,562,380 "	177,809 "	8,787 "
"	"	20	1,267,720 "	132,058 "	9,600 "
"	Mixed Fir and Cedar	39	2,278,940 "	248,461 "	9,172 "
Everett	" " " "	20	1,551,360 "	200,720 "	7,729 "
"	Fir	7	419,240 "	48,233 "	8,700 "
Seattle	Mixed Hemlock, Cedar, Fir and Spruce	20	1,287,820 "	139,110 "	9,258 "
Bellingham	Mixed Cedar and Fir.....	29	1,902,750 "	227,950 "	8,347 "
	Total	300	20,158,870 "	2,421,708 "	8,325 "

[fol. 207]

N. P. Exhibit No. 9

Comparison of per Ton Mile Earnings on Various Commodities Moving in Volume with Those on Saw Logs

Figures Shown are in Mills and Base on Tariff Rates of June 27, 1921

Distance in miles	†Logs		Common brick—Distance rates, item 3500, Henry's tariff #1, W. P. S. C. 1	Cement—Rates applying from Bellingham, Wash., to main line stations, Kanaskat, Wash., and intermediate points (N. P. tariff 2164-B, W. P. S. C. 1175)	Crushed limestone—Fertilizer rates, item 3515, Henry's tariff #1, W. P. S. C. 1	‡ Grain—Distance rates, N. P. tariff 3078-A, W. P. S. C. No. 1248	‡ Lumber—Distance rates, N. P. tariff 3077-A, W. P. S. C. No. 1172	Sand & gravel rates, Henry's tariff 25-B, W. P. S. C. No. 50	Coal — Rates applying from Wilkeson, Wn., to main-line station in Washington north of and inc. Ridgefield, Wash. (N. P. tariff 1100, W. P. S. C. 1191)	§ Junk—Rates applying to Seattle from main-line stations; Martins Bluff, Wash., and north	Rates applying on ore, valued $5.00 to $15.00 per ton of 2,000 lbs., from Montana main-line stations to East Helena smelter (N. P. tariff 136-D, I. C. C. 7137)
	Distance rates (N. P. tariff 398-L, W. P. S. C. 1172)	Average of special commodity rates									
5	76	76	200	260	160	160	120	120	200	300	120
10	38	30	130	150	100	100	100	60	100	150	60
15	31	24	86	100	67	73	67	40	66	100	40
20	25	22	70	85	55	65	50	30	50	75	35
25	21	15	56	68	44	56	44	32	45	75	32
30	18	13	50	57	43	47	43	27	38	63	27
35	16	15	43	51	37	46	43	26	36	57	26
40	15	14	40	45	35	45	33	23	46	49	26
45	13	11	56	*40	31	42	29	22	44	51	22
50	12	12	36	*36	30	38	28	22	40	62	22
55	12	11	33	*33	27	36	29	22	36	56	20
60	11	9	32	*30	27	38	27	18	33	50	20
65	10	10	29	*28	25	37	27	20	35	48	20
70	10	9	29	*26	26	34	26	19	32	44	19
75	10	10	27	*24	24	32	24	19	30	40	19
80	9	8	29	*23	25	31	24	18	28	39	18
85	9	9	27	*21	24	30	22	16	26	37	16
90	8	8	27	*20	23	29	22	17	25	34	16
95	8	8	25	*19	22	30	24	16	24	33	16
100	8	8	25	*18	23	29	23	15	23	31	16
105	8	8	24	*17	22	29	23	15	21	30	15
110	7	7	23	*16	20	27	22	15	23	28	15
115	7	7	23	*16	21	27	21	14	22	27	15
120	7	7	22	*15	20	26	20	15	21	26	15
125	7	7	21	*14	19	26	19	14	20	25	14
130	6	6	22	*14	20	25	19	14	19	24	14
135	6	6	21	*18	19	26	18	14	19	23	14
140	6	6	21	20	19	25	17	14	18	22	14
145	6	..	21	20	19	24	18	13	17	21	14
150	6	..	20	20	19	23	17	13	17	20	14

*Influenced by water compelled rates established to Seattle and Tacoma that were not restricted as to intermediate application.

†Factor of 8.325 lbs. per 1,000 ft. used in converting rates to the weight basis. This secured from exhibit introduced in connection with this hearing.

‡These distance rates are the lowest applicable to these commodities in force in Western territory and were used as a measure for special commodity rates in force between N. P. stations in Washington West of the Cascades.

§Junk, inc. scrap brass, bronze or copper, subject to higher rates than shown above.

CHART

TOO

LARGE

FOR

FILMING

[fol. 209]

N. P. Exhibit No. 16

Special—150-A

Northern Pacific Railway Company

Mileage

	Seattle division						Tacoma d		
	September, 1920		October, 1920		November, 1920		September, 1920		October,
	Main line	Brch. line	Main line	Brch. line	Main line	Brch. line	Main line	Brch. line	Main line
Freight train miles*	36,010	19,465	39,895	20,582	31,167	19,465	20,098	27,940	20,076
Freight engine miles*	53,577	21,435	61,109	22,935	45,186	21,485	23,018	29,579	23,003
Freight car miles—loaded	1,300,441	351,430	1,287,486	364,116	1,042,592	310,661	482,894	372,698	487,852
Freight car miles—empty	312,359	190,340	533,383	210,610	306,653	182,817	171,120	291,030	207,640
Gross ton miles	67,661,783	20,473,518	74,951,305	21,379,045	56,398,288	18,068,046	24,803,188	23,241,551	25,920,032
Net ton miles	34,350,172	10,014,549	36,610,486	10,152,108	28,535,661	8,388,939	11,506,129	11,377,684	11,718,054
	September, 1919		October, 1919		November, 1919		September, 1919		Octobe
	Main line	Brch. line	Main line	Brch. line	Main line	Brch. line	Main line	Brch. line	Main line
Freight train miles*	34,755	19,783	35,801	21,569	30,172	17,856	21,473	26,643	22,828
Freight engine miles*	53,071	21,020	57,049	22,914	47,085	19,009	24,350	29,201	25,676
Freight car miles—loaded	1,278,370	244,722	1,330,332	281,733	1,066,845	220,567	528,333	359,961	614,519
Freight car miles—empty	322,246	179,670	282,653	186,800	223,049	140,910	237,770	297,093	225,811
Gross ton miles	69,059,010	15,141,639	70,300,560	17,533,284	55,141,534	13,014,345	29,087,985	22,601,289	32,470,740
Net ton miles	36,190,970	7,502,495	37,391,036	9,144,472	26,755,422	6,456,406	13,536,880	10,668,979	15,858,196

Office of Asst. General Auditor, Division of Statistics, March 21st, 1921.

*Includes 80% of mixed service.

N. P. Exhibit No. 16

Special—150-A

Northern Pacific Railway Company

Mileage

on			Tacoma division									
0	November, 1920		September, 1920		October, 1920		November, 1920		Total by months, 1920			Grand total, 1920
rch. line	Main line	Brch. line	Main line	Brch. line	Main line	Brch. line	Main line	Brch. line	September	October	November	
20,582	31,167	19,465	20,098	27,940	20,076	28,363	20,361	27,064	103,513	108,916	98,057	310,486
22,935	45,186	21,485	23,018	29,579	23,003	29,833	23,402	28,577	127,609	136,880	118,650	383,139
364,116	1,042,592	310,661	482,894	372,698	487,852	332,634	440,261	332,369	2,507,463	2,472,088	2,125,883	7,105,434
210,610	306,653	182,817	171,120	291,030	207,640	265,846	217,207	270,378	964,849	1,217,479	977,055	3,159,383
379,045	56,398,288	18,068,046	24,803,188	23,241,551	25,920,032	20,975,840	24,046,769	21,087,855	136,180,040	143,226,222	119,600,958	399,007,220
152,108	28,535,661	8,388,939	11,506,129	11,377,684	11,718,054	10,004,321	10,795,624	10,202,149	67,248,534	68,484,969	57,922,373	193,655,876
19	November, 1919		September, 1919		October, 1919		November, 1919		1919			1919
rch. line	Main line	Brch. line	Main line	Brch. line	Main line	Brch. line	Main line	Brch. line	September	October	November	
21,569	30,172	17,856	21,473	26,643	22,828	29,470	19,747	22,950	102,654	109,668	90,725	303,047
22,914	47,085	19,009	24,350	29,201	25,676	32,368	21,679	24,949	127,642	138,007	112,722	378,371
281,733	1,066,845	220,567	528,333	359,961	614,519	372,544	508,998	264,887	2,411,386	2,599,128	2,061,297	7,071,811
186,800	223,049	140,910	237,770	297,093	225,811	280,390	136,235	175,777	1,036,779	975,654	677,971	2,690,404
,533,284	55,141,534	13,014,345	29,087,985	22,601,289	32,470,740	23,491,010	25,504,528	15,929,535	135,889,923	143,995,594	109,589,942	389,475,459
,144,472	26,755,422	6,456,406	13,536,880	10,668,979	15,858,196	11,237,780	12,293,709	7,662,737	67,899,324	73,631,484	53,168,274	194,699,082

[fol. 206] N. P. EXHIBIT No. 8

Comparison of saw log rates in force in Washington on June 24, 1918, with lignite coal rates prescribed by the North Dakota Commission in 1910 and found uncompensatory and confiscatory by the United States Supreme Court (Northern Pacific Railway vs. State of North Dakota, volume 236 U. S., page 585)

Distances	Rates per ton of 2,000 pounds: *Saw logs (N. P. tariff 398-J, W. P. S. C. 1076) — Based on single car-distance rates	Based on lowest special commodity rate	†Based on average rate	Lignite coal (N. P. tariff 1303-A)
5 miles	24	18	24	30
10 "	24	14.4	17.6	30
15 "	30	21.6	23.5	35
20 "	32.4	24	27.6	37
25 "	33.6	24	24.8	38
35 "	36	30	33	41
50 "	39.6	31.2	39	46
75 "	45.6	40.8	‡48.6	53
100 "	50.5	45.6	50.5	61
125 "	54	....	54	68
150 "	56.5	....	....	76

(Here follow N. P. Exhibits Nos. 9, 15, and 16, marked side folio pages 207, 208, and 209)

*Unit of 8,325 pounds per 1,000 ft. used in converting to weight basis. This unit taken from exhibit introduced in Cause No. 5159.

†These figures based on average Nor. Pac. Ry. rates shown in exhibit prepared by Mr. Calderhead of the Department of Public Works in connection with Cause No. 5159. Advances authorized by General Order #28 and Ex Parte #74 have been deducted.

‡This includes shipments moving into Yakima on rate higher than applying west of Cascades.

N. P. Exhibit No. 17

Special 150-B

Northern Pacific Railway Company

Estimate of Cost of Handling Logs on Seattle and Tacoma Divisions in Washington, September to November, 1920, inclusive

	Seattle and Tacoma main line (Incl. Puget Sound termi)		Seattle and Tacoma main line (Excl. Puget Sound		Seattle and Tacoma branch lines	
	Freight, amount	Per estimate loaded car mile (in cents)	Freight, amount	Per estimated loaded car mile (in cents)	Freight, amount	Per estimated loaded car mile (in cents)
Total station service	$309,874	5.24	$46,453	.79	$50,353	1.82
Total yard service	445,884	7.54	84,179	1.42	69,771	2.52
Train engineman	83,898	1.41	83,898	1.41	75,414	2.72
Fuel for train locomotives	128,552	2.17	128,552	2.17	88,203	3.19
Water for train locomotives	1,543	.03	1,543	.03	2,241	.08
Lubricants for train locomotives	1,334	.02	1,334	.02	903	.03
Other supplies for train locomotives	1,127	.03	1,127	.03	810	.03
Enginehouse expenses—train	33,241	.56	33,241	.56	16,081	.58
Total engine service	249,695	4.22	249,695	4.22	183,652	6.63
Trainmen	87,535	1.48	87,535	1.48	108,829	3.93
Train supplies and expenses	25,633	.43	25,633	.43	11,495	.42
Total train service	113,168	1.91	113,168	1.91	120,324	4.35
Total casualties	46,097	.78	35,156	.60	17,224	.62
Dispatching trains	19,886	.33	19,886	.33	12,589	.45
Telegraph & telephone operations	4,109	.07	2,722	.04	688	.03
Signal and interlocker operation	5,838	.10	3,926	.07	13	...

Crossing protection	8,155	.14	1,593	.03	931	.03
Drawbridge operation	3,023	.05	862	.02	3,369	.12
Other accounts	[17,257]*	[.29]*	[22,350]*	[.38]*	7,158	.26
Total miscellaneous	23,754	.40	6,639	.11	24,748	.89
Total transportation expense	$1,188,472	20.09	535,290	9.05	466,072	16.83
Repairs of steam locomotives	131,662	2.23	82,368	1.39	43,373	1.57
Repairs of freight cars	176,331	2.97	176,331	2.98	91,607	3.31
Shop machinery	1,528	.02	1,103	.02	657	.02
Superintendence	11,257	.19	6,318	.10	5,018	.18
Injuries to persons	1,416	.03	875	.02	149	.01
Other mtce. of equipm't incl. dep'n	42,388	.72	31,775	.54	19,278	.70
Total maintenance of equipment	364,582	6.16	298,770	5.05	160,082	5.79
Total maintenance of way & structures.	449,230	7.60	185,782	3.14	338,693	12.22
Total traffic	13,654	.23	5,729	.10	4,883	.18
Total general	37,546	.63	15,486	.26	13,927	.50
Total operating expenses—freight	$2,053,484	34.71	1,041,057	17.60	983,657	35.52
Loaded car miles—freight	5,041,526		5,041,526		2,063,908	
Empty car miles—freight	1,748,362		1,748,362		1,411,021	
Estimated loaded car miles-Frt. (2 empties included as one load)	5,915,707		5,915,707		2,769,418	
Applying cost per estimated loaded car mile as above against log business would give expense as follows:			(excl. Puget Sd. Div)			
Main line (incl. Puget sound Div.)		$105,132.42		53,308.29		
Branch lines		325,006.58		325,006.58		
Total		$430,139.00		378,314.87		

[*Red in copy.]

Estimate of Cost of Handling Logs—Continued

	Seattle and Tacoma main line (Incl. Puget Sound terml)		Seattle and Tacoma main line (Excl. Puget Sound		Seattle and Tacoma branch lines	
	Freight, amount	Per estimate loaded car mile (in cents)	Freight, amount	Per estimated loaded car mile (in cents)	Freight, amount	Per estimated loaded car mile (in cents)
Revenue		376,871.79		376,871.79		
Deficit from operation		[$53,267.21]*		[1,443.08]*		
Number of cars of logs handled	25,215					
Average haul per car	32.2					
Car miles	811,923					
Empty car miles (assuming that each loaded car necessitated an empty movement)	811,923					
Estimated loaded car miles (loaded and one half of empties	1,217,884					

Divided between main line and branches on basis of cars handled, as follows:

	Main line	Branch lines	Total
Cars handled	10,392	51,391	41,783
percent	24.87	75.13	100.00
Estimated loaded car miles	302,888	914,996	1,217,884

[*Red in copy.]

[fol. 212]

N. P. EXHIBIT No. 18

Special 150-C

Northern Pacific Railway Company

Estimated Cost of Handling Logs on Seattle and Tacoma Divisions in Washington, Year Ended December 31, 1920

(Operating Expenses Divided on Basis Prescribed by Interstate Commerce Com'n)

	Seattle and Tacoma Main Line (Incl. Puget Sound terminals)		Seattle and Tacoma main line (Excl. Puget Sound terminals)		Seattle and Tacoma branch lines	
	Freight amount	Per estimated loaded car mile (in cents)	Freight amount	Per estimated loaded car mile (in cents)	Freight amount	Per estimated loaded car mile (in cents
Total station service	$1,375,321.99	6.00	$216,743.08	.94	$517,798.45	2.94
Total yard service	1,708,050.66	7.45	303,437.67	1.33	261,958.75	2.42
Train enginemen	321,218.48	1.40	321,216.46	1.40	285,375.69	2.64
Fuel for train locomotives	511,681.90	2.23	511,681.90	2.23	370,708.11	3.43
Water for train locomotives	8,450.79	.04	8,450.79	.04	9,785.60	.09
Lubricants for train locomotives	4,222.27	.02	4,222.27	.02	5,063.29	.03
Other supplies for train locomotives	4,031.69	.02	4,031.69	.02	2,961.89	.03
Enginehouse expenses—train	123,799.83	.54	123,799.83	.34	63,134.01	.58
Total engine service	$973,404.96	4.25	973,404.96	4.25	735,228.49	6.80
Trainmen	321,348.55	1.40	321,348.55	1.40	409,254.70	3.78
Train supplies and expenses	87,421.22	.38	87,421.22	.36	43,965.39	.41
Total train service	$408,769.77	1.78	408,769.77	1.78	453,220.09	4.19
Total casualties	253,662.34	1.11	197,275.37	.86	124,173.87	1.15

Estimated Cost of Handling Logs—Continued

	Seattle and Tacoma Main Line (Incl. Puget Sound terminals)		Seattle and Tacoma main line (Excl. Puget Sound terminals)		Seattle and Tacoma branch lines	
	Freight amount	Per estimated loaded car mile (in cents)	Freight amount	Per estimated loaded car mile (in cents)	Freight amount	Per estimated loaded car mile (in cents
Dispatching trains	81,016.06	.35	81,016.06	.33	50,154.16	.46
Telegraph and telephone operation	24,687.84	.11	14,412.78	.06	4,875.93	.05
Signal and interlocker operation	28,056.79	.12	18,343.62	.03	1,403.93	.01
Crossing protection	44,308.02	.20	7,708.89	.04	5,014.28	.05
Drawbridge operation	20,498.04	.09	5,300.42	.02	22,015.24	.20
Other accounts	[23,445.78]*	[.11]*	[63,465.86]*	[.28]*	51,431.20	.48
Total Miscellaneous	$173,320.97	.76	63,313.91	.23	134,894.74	1.25
Total Transportation Expenses	$4,892,530.69	21.35	2,163,346.76	9.44	2,027,274.39	18.75
Repairs of steam locomotives	574,301.20	2.51	363,792.04	1.59	184,192.04	1.70
Repairs of freight cars	690,287.24	3.01	690,267.24	3.01	363,405.26	3.36
Shop machinery	18,581.19	.08	5,987.07	.03	3,727.50	.03
Superintendence	52,814.85	.23	33,424.07	.15	24,528.12	.23
Injuries to persons	7,825.67	.03				
Other mtce. of equipment—incl depreciation	224,556.76	.98	2,698.82 170,071.25	.01 .74	1,512.34 93,971.53	.01 .92
Total Maintenance of Equipment	$1,568,347.01	6.84	1,266,260.49	5.65	676,336.81	6.25
Total Maintenance of Way & Structures	$1,957,945.08	8.54	899,141.40	3.92	1,406,151.11	13.00
Total Traffic	51,821.47	.23	21,196.85	.09	18,369.65	.17
Total General	217,050.96	.95	78,834.78	.35	69,846.39	.65
Total operating expenses—freight	$8,687,695.21	37.91	4,428,800.28	19.33	4,197,978.35	38.82

Loaded car miles—freight	19,691,416		19,691,416	8,128,799
Empty car miles— "	6,449,897		6,449,897	5,369,418
Estimated loaded car miles (2 empties included as one load)	22,916,365		22,916,365	10,813,508
Applying cost per estimated loaded car mile as above against log business would give expenses as follows:			(Excl. Puget Sd. Div)	
Main line (incl. Puget Sd. Division)		$451,506.96		$230,219.72
Branch lines		1,396,702.84		1,336,702.84
Total		$1,848,209.80		$1,626,922.56
Revenue		1,308,875.32		1,308,875.32
Deficit from operation		[$539,334.48]*		[$318,047.24]*
Number of cars of logs hauled	101,725			
Average haul per car—miles	31.4			
Car miles	3,192,595			
Empty car miles (assuming that each loaded car necessitates an empty movement)	3,192,395			
Estimated loaded car miles (loaded & one half of empties)	4,788,892			

Divided between main line and branches on basis of cars handled for September to November 1920 as follows:

	Main Line	Branch lines	Total
Cars handled	10,392	31,391	41,783
Per cent	24.87	75.13	100.00
Estimated loaded car miles, log traffic—year 1920	1,190,997	3,597,895	4,798,892

Office of the Asst. General Auditor, Division of Statistics, June 16, 1921.

[*Red in copy.]

[fol. 213]

N. P. Exhibit No. 19

Special No. 159

Northern Pacific Railway Company

Statement Showing Washington Intrastate Traffic on Logs and All Other Carloads; Also All Traffic for Entire Line, Eight Months ending August, 1920, and Three Months Ending November, 1920

	January to August, 1920			September to November, 1920		
	Washington-Intrastate		Entire line intrastate & interstate, total carload traffic	Washington-Intrastate		Entire line intrastate & interstate, total carload traffic
	Logs	All other carload traffic		Logs	All other carload traffic	
Number of cars.....	71,785	66,421	479,151	25,215	28,736	201,484
Tons	2,296,643	2,249,064	14,768,802	799,413	887,585	6,338,222
Ton Miles	71,585,134	223,084,434	5,027,867,926	25,723,311	89,953,977	2,048,895,773
Revenue	$862,340.43	$3,752,595.54	$42,765,783.13	$376,871.79	$1,965,209.19	$22,654,925.76
Car Miles.....	2,239,692	6,588,963	163,103,000	811,923	2,910,957	65,139,777
Average Haul.....	31.2	99.2	340.4	32.2	101.3	323.3
" rate per ton mile	$.01205	$.01682	$.00851	$.01465	$.02185	$.01106
" revenue per car	$12.01	$56.50	$89.25	$14.95	$68.39	$112.44
" rate per car mile	$.38503	$.56953	$.26220	$.46417	$.67511	$.34779

Office of Auditor Freight Receipts, St. Paul, Minn., Feb. 14th, 1921.
AFR-S-1551.

[fol. 214] N. P. EXHIBIT No. 20

Northern Pacific Railway Company

Movement of Cars of Logs, Seattle and Tacoma Divisions

Seattle Division

	Cars handled in exclusive log trains			Log cars handled with other commodities		
	Number of cars			Number of cars		
	Total	Main line	Branch lines	Total	Main line	Branch lines
September, 1920	1,560	113	1,560	3,184	2,007	1,961
October, 1920	1,746	...	1,746	2,791	1,662	1,790
November, 1920	1,195	72	1,173	1,906	1,114	1,336
	4501	185	4,479	7,881	4,783	5,087

Tacoma Division

	Cars handled in exclusive log trains			Log cars handled with other commodities		
	Number of cars			Number of cars		
	Total	Main line	Branch lines	Total	Main line	Branch lines
September, 1920	3,207	1,239	3,163	4,500	615	4,314
October, 1920	2,869	1,021	2,913	3,869	711	3,619
November, 1920	3,140	622	3,127	5,031	1,216	4,689
	9,216	2,882	9,203	13,400	2,542	12,622
Total	13,717	3,067	13,682	21,281	7,325	17,709

St. Paul, Minnesota, March 15th, 1921.

[fol. 215]

N. P. Ex. 21

Special 130-D

Northern Pacific Railway Company

Estimated Cost of Handling Logs on Seattle and Tacoma Divisions in Washington, September to November, 1920, Inclusive, if Proposed Wage Reduction under Decision of Wage Board, Effective July 1, 1921, Had Been in Effect During That Period

	Seattle and Tacoma main line (Incl. Puget Sound terminal.)		Seattle and Tacoma main line (Excl. Puget Sound Terminal)		Seattle and Tacoma branch lines	
	Freight amount	Per estimated loaded car mile (in cents)	Freight amount	Per estimated loaded car mile (in cents)	Freight amount	Per estimated loaded car mile (in cents)
Total station service	$291,096	4.92	$43,638	.74	$47,302	1.71
Total yard service	418,863	7.08	79,078	1.34	65,543	2.37
Train engineman	78,814	1.33	78,814	1.33	70,844	2.56
Fuel for locomotives	120,762	2.04	120,762	2.04	82,858	2.99
Water for train locomotives	1,449	.02	1,449	.02	2,105	.08
Lubricants for train locomotives	1,253	.02	1,253	.02	848	.03
Other supplies for train locomotives	1,059	.02	1,059	.02	761	.03
Enginehouse expenses—train	31,227	.53	31,227	.53	15,106	.54
Total engine service	$234,564	3.96	254,364	3.96	172,522	6.23
Trainmen	82,230	1.39	82,230	1.39	102,234	3.69
Train supplies and expenses	24,080	.41	24,080	.41	10,798	.39
Total train service	$106,310	1.80	106,310	1.00	113,032	4.08

Total casualties	43,303	.73	33,026	.56	16,180	.58
Dispatching trains	$18,681	.32	18,681	.32	11,825	.43
Telegraph and telephone operation	3,860	.07	2,559	.04	646	.02
Signal and interlocker operation	5,484	.09	3,688	.06	12	—
Crossing protection	7,661	.13	1,496	.03	875	.03
Drawbridge operation	2,840	.03	810	.01	3,165	.12
Other accounts	[16,211]*	[.28]*	[20,996]*	[.36]*	6,724	.24
Total miscellaneous	$22,315	.38	6,238	.10	23,247	.84
Total transportation expenses	$1,116,451	18.87	502,854	8.50	437,826	15.31
Repairs of steam locomotives	123,025	2.08	76,965	1.30	40,528	1.46
Repairs of freight cars	164,764	2.79	164,764	2.79	85,598	3.09
Shop machinery	1,428	.02	1,031	.02	614	.02
Superintendence	10,518	.18	5,904	.10	4,689	.17
Injuries to persons	1,323	.02	818	.01	139	.01
Other mtce. of equipment, incl. depreciation	42,388	.72	31,775	.54	19,278	.70
Total maintenance of equipment	$343,446	5.81	231,257	4.76	150,846	5.45
Total maintenance of way and structures	$401,162	6.78	165,903	2.80	302,453	10.92
Total traffic	$12,783	.22	5,363	.09	4,571	.16
Total Central	$34,287	.56	14,142	.04	12,718	.46
Total operating expenses—Freight	$1,908,229	32.26	929,319	16.39	908,414	32.60
Estimated loaded car miles—freight	5,915,707		5,915,707		2,769,418	

Estimated Cost of Handling Logs—Continued

	Seattle and Tacoma main line (Incl. Puget Sound terminal.)		Seattle and Tacoma main line (Excl. Puget Sound Terminal)		Seattle and Tacoma branch lines	
	Freight amount	Per estimated loaded car mile (in cents)	Freight amount	Per estimated loaded car mile (in cents)	Freight amount	Per estimated loaded car mile (in cents)
Estimated loaded car miles—log traffic	302,888		302,888 (excl. Puget Sd Div)		914,996	
Applying cost per estimated loaded car mile as above against log business would give expense as follows:						
Main line (incl. Puget Sound Div'n)		$97,711.67		$49,643.34		
Branch lines		300,118.69		300,118.69		
Total		397,830.36		349,762.03		
Revenue		376,871.79		376,871.79		
Net revenue or deficit from operation		[$20,958.57]*		$27,109.76		

Office of Asst. General Auditor, Division of Statistics, June 17th, 1921.

[*Red in copy.]

[fol. 216] N. P. Exhibit No. 25

Tacoma Division

1st. Number cars logs loaded each Month, 1920:

January	3,853
February	4,751
March	5,847
April	6,016
May	6,773
June	7,880
July	3,723
August	6,310
September	6,667
October	5,528
November	6,111
December	3,239
Total	66,698
Monthly Avg.	5,558
Daily Avg.	214

2nd. Avg. number log flats on division including bad orders:

As per Inventory March, 1920	950	Cars.
" " " Sept. 1920	905	"
Average for Year	927	"

3rd. Average number cars required to produce one load:

Total daily loading (214) into total cars in service (927) or 4.3 cars.

4th. Average number log flats in bad order, 107.

5th. Percentage cars in bad order to total number, 927 into 107—12%.

[fol. 217] N. P. Exhibit No. 26

Data on Repairs to Log Cars, Northern Pacific Railway Company, Repaired at South Tacoma Shops September, 1920

1.	Number of log flats having broken sills renewed	80
2.	Number of broken sills renewed in such cars	187
3.	Number of open cars other than log flats having broken sills renewed	84
4.	Number of sills renewed in such cars	207
5.	Percentage of log flats having broken sills renewed to total number of open cars upon which sills renewed	49%
6.	Percentage of sills renewed on log flats to total number of sills renewed	47%
7.	Number of log flats upon which heavy repairs made including sills	60
8.	Number of other open cars upon which heavy repairs made including sills	87
9.	Percentage of log flats having heavy repairs to total number of cars having heavy repairs	40-7/10%
10.	Average cost of repairs per car log flats	22.97
11.	Average cost of repairs per car other than open equipment	24.95
12.	Percentage cost per car log flats as compared to other open equipment	92%

South Tacoma, Wash., May 11, 1921.

[fol. 218] N. P. Exhibit No. 27

Northern Pacific Railway Company

Tacoma Division

Statement Showing Cars Handled Through Terminals Month of March, 1921, and Cars Set on Repair Track Same Period (Each Car Counted Once)

Tacoma

	Log flats	Other cars	Total cars
Cars Handled	2204	9920	12124
Cars set on Repair Track	680	703	1383
Percentage cars set on Repair track to Total cars handled	30.8	7.1	11.4

Centralia

Cars Handled	403	9467	9870
Cars set on repair track	192	515	707
Percentage cars set on repair track to total cars handled	47.6	5.4	7.1

Hoquiam

Cars Handled	408	858	1266
Cars set on repair track	124	78	202
Percentage cars set on repair track to total cars handled	32.3	9.9	15.9

Recapitulation

Cars Handled	3015	20245	23260
Cars set on repair track	996	1293	2292
Percentage cars set on repair track to total cars handled	33.0	6.3	9.8

[fol. 219] N. P. Exhibit No. 28

Northern Pacific Railway

Tacoma Division

Statement Showing Proportion Cars Logs to Other Loaded Cars Handled Through Terminals, Month of Sept., 1920 (Each Loaded Car Counted Once)

	Cars logs	Other loaded cars	Logs—per cent of total
Tacoma	1967	9127	17.73
Centralia	631	5856	9.72
Hoquiam	1170	1641	41.62
Total	3768	16624	18.48

Office of Division Superintendent, Tacoma, May 2, 1921.
(Signed) W. C. Albee, Superintendent.

[fol. 220] N. P. Exhibit No. 29

Northern Pacific Railway Co.

Cost of Picking Up Logs—Tacoma Division

	1921	1920	Total
B. & B. Crews, Labor	2174.67	2006.46	4181.13
Equipment rental, outfit cars, derrick, etc.	329.40	316.97	656.37
Work Train, engine and trainmen Wages	1228.52	1731.92	2960.44
Engine Rental	297.00	357.50	656.50
Fuel and engine supplies Work Train	506.25	1180.00	1686.25
Fuel and engine supplies Derrick	56.37	74.35	120.72
Total cost	$4602.21	5667.20	10269.41
Work Train Days	27	32½	59½
Number of logs picked up	645	497	1142
F. B. M. in logs picked up	774265	426430	1200700
Number of flats used	136	97	233
Revenue derived from logs billed into destination based on average of $2.00 per M feet	$1548.53	852.86	2401.49

	1921	1920	Total
Cost per M ft. to pick up.....	5.98	13.29	8.55
Revenue per M ft. to pick up.	2.00	2.00	2.00
Loss per thousand feet	$3.98	$11.29	$6.55

W. C. Albee, Superintendent.

Tacoma, Washington, June 10th 1921, Office of Division Superintendent.

[fol. 221] N. P. Exhibit No. 30

Northern Pacific Railway Company

Office of Division Superintendent

Statement Showing Cost of 41 Foot Flats (Without Bunks) Pre-War Prices and Present Prices

Mr. H. M. Curry, General Mechanical Superintendent, Northern Pacific, states:

"We figure from 1910 to 1914 the price was about $800.00 each and the present price about $1,325.00 each both F. O. B. builders' plant."

Above figures agree substantially with figures quoted by Car Building Companies.

[fols. 222 & 223] N. P. Exhibit No. 31

Western Washington

Market Price of Logs on Puget Sound, Grays Harbor, & Columbia River, Years 1896 to 1920

Note—Record of years 1896 to 1909 from Dept. of Commerce Report on Lumber Industry, Part 4, Page 378

Puget Sound

Year	No. 1 Fir	No. 2 Fir	No. 3 Fir	Cedar	Hemlock
1896	$.... $5.50	$.... $4.50	$2.50 to $3.00	$.....	$....
1897	.... 5.50	.... 4.50	.... 2.50	.....	....
1898	5.50 to 6.00	4.50 to 5.00	3.00 to 3.50	.....	....
1899	5.50 to 7.00	4.75 to 5.50	.... 3.50	.....	....
1900	7.00 to 7.50	5.75 to 6.00	3.50 to 4.00	.....	....
1901	.... 7.50	6.00 to 6.50	4.00 to 4.25	.....	....
1902	7.50 to 9.00	6.50 to 7.50	4.25 to 5.00	.....	....
1903	9.75 to 8.50	8.00 to 6.50	5.50 to 4.50	.....	....
1904	8.50 to 7.50	6.50 to 6.00	.... 4.50	.....	....
1905	8.00 to 9.00	6.50 to 7.50	4.00 to 5.00	.....	....
1906	9.00 to 14.00	7.50 to 11.00	5.00 to 8.00	.....	....
1907	15.00 to 13.00	12.00 to 10.00	9.00 to 6.50	.....	....
1908	13.00 to 11.00	10.00 to 8.00	6.50 to 5.50	.....	....
1909	12.00 to 11.00	9.50 to 8.00	6.25 to 5.00	.....	....
1910	12.80	10.00	7.00	11.56	6.00
1911	11.70	9.00	6.00	11.08	6.00
1912	12.00	9.00	6.10	13.25	6.00
1913	13.20	9.70	6.70	13.48	6.70
1914	11.40	8.30	5.50	12.68	5.50
1915	11.00	8.00	5.70	12.75	5.70
1916	12.40	9.50	6.50	13.83	6.50
1917	13.90	11.70	8.70	15.21	8.70
1918	19.50	15.70	11.60	15.79	11.60
1919	20.00	16.00	12.00	23.00	12.00
1920	30.00	23.00	17.00	35.00	16.00

Grays Harbor

Fir, Mixed Grades

1900	.....	5.00 to 6.00	.....	.....	.....
1901	.....	5.00 to 6.50	.....	.....	.....
1902	.....	5.00 to 6.00	.....	.....	.....
1903	.....	6.00 to 6.50	.....	.....	.....
1904	.....	6.00 to 6.50	.....	.....	.....
1905	.....	6.50 to 8.00	.....	.....	.....
1906	.....	7.50 to 11.50	.....	.....	.....
1907	.....	.... 12.00	.....	.....	.....
1908	.....	.... 10.00	.....	.....	.....
1909	.....	12.00 to 9.00	.....	.....	.....

	No. 1 fir	No. 2 fir	No. 3 fir		
1910	12.80	9.80	6.80	.....	6.80
1911	12.00	9.00	6.00	.....	6.00
1912	12.00	9.00	6.20	.....	6.20
1913	12.90	9.70	6.60	.....	6.60
1914	11.60	8.40	5.50	.....	5.50
1915	11.00	8.00	5.70	.....	5.70
1916	12.40	9.60	6.60	.....	6.60
1917	14.50	13.30	8.50	.....	8.50
1918	19.30	15.70	11.60	.....	11.60
1919	20.00	16.00	12.00	.....	12.00
1920	30.00	23.00	17.00	.....	16.00

[fol. 224] N. P. EXHIBIT No. 34

Sheet No. 1

Statement Showing Normal Land Values; Also Values for Railroad Purposes of Northern Pacific Right of Way on Tacoma Division

Val. Sec. No,	From—	To—	Naked land value	R. R. value
4	Mill	East Portland Tunnel	.....	.....
31	E. Portal Tunnel	Tenino	$857,766	$2,355,610
5	Lakeview	Tenino	67,049	130,528
6	Tenino	Kalama	1,107,017	1,788,636
7	Kalama	Vancouver (Not including Vancouver)	102,588	195,633
10	Palmer Jct.	Meeker	322,840	623,646
10-A	Cascade "	Spiketon	3,601	6,901
10-B	" "	Wilkeson	18,910	41,019
10-C	Carbonado Jct.	Carbonado	1,646	3,786
10-D	Carbonado	Fairfax	7,621	16,514
10-E	Crocker	Wingate	1,818	4,181
10-F	Orting	Electron	6,196	11,437
27	St. Clair	Gate	62,929	111,238
27-A	Lakeview	Nisqually	21,804	39,965
28	Centralia	Moclips	127,300	261,293
28-A	Elma	Simpson	5,352	12,310
28-B	Aberdeen Jct.	Bay City	14,088	28,952
29	Chehalis	South Bend	306,321	548,708
6-A	Centralia	Mendota	9,826	22,150
32	Vancouver	Yacolt	29,249	63,189
30	Tumwater Branch		5,201	10,896
	Aberdeen Terminals & Cosmopolis		279,566	419,346
	Vancouver, Wash		103,435	124,122
	Totals		$3,462,123	$6,820,060

[fol. 224 a] Sheet No. 2

Statement Showing Normal Land Values Also Values for Railroad Purposes of Northern Pacific Right of Way on Seattle Division West of Ellensburg, Washington

Val. Sec. No,	From—	To—	Naked land value	R. R. value
2	Ellensburg	Palmer Junction	$262,791	$501,612
2-B	Cle Elum	Lakedale	20,215	33,275
2-C	Kanasket	Kerriston	4,106	11,086
2-D	Palmer Junction	East Auburn	17,487	40,603
8				
8-A	Black River Jct.	Woodinville	145,986	294,046
9	Woodinville	Sumas	398,142	741,469
9-A	Snohomish	Everett	616,222	757,898
9-B	Edgecomb	Kruse	6,828	14,680
8-C	Joint Industry Tracks at Everett		1,787	1,787
23	Woodinville	Sallal	116,552	245,978
24	Hartford Jct.	Monte Cristo	18,709	40,062
25	Arlington	Darrington	30,350	65,144
26	Wickersham	Bellingham	544,113	827,888
	Totals		$2,183,288	$3,575,528

[fol. 224b] Sheet No. 3

Statement Showing Normal Land Values; Also Values for Railroad Purposes of Northern Pacific Right of Way on Puget Sound Division

Val. Sec. No,	From—	To—	Naked land value	R. R. value
3	Tidewater	Black River Jct.....	$606,424	$1,047,764
8	Seattle Terminals			
8-B	" "			
8-C	" "			
8-D	" "		12,952,458	17,630,588
4	Wharf	Lakeview and Tacoma Terminals	8,020,896	11,123,012
2-D	East Auburn.....	Auburn.....	3,566	91,776
4-A	Joint Industry Tracts with C. M. & St. P. Ry.....		75,187	75,187
	Totals		$21,686,531	$29,968,327

[fol. 225] N. P. EXHIBIT No. 35

Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

[fols. 225-1 & 2] Northern Pacific Railway Company Valuation Department

Estimated Cost of that Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including all Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle-Puget Sound and Tacoma Divisions in the State of Washington, Exclusive of Land.

Recapitulation

Cost of Lines West of Ellensburg, exclusive of land, Auburn, Tacoma and Seattle Terminals.....		$95,381,319.00
Auburn Terminals (Sheet 10).....	1,342,131	
Tacoma " (Sheet 11).....	10,228,763	
Seattle " (Sheet 18).....	9,378,390	
Cost of Terminals (Total).....		$20,949,284.00
Total Cost, exclusive of Land.....		$116,330,603.00

Office of Valuation Engineer, St. Paul, Minnesota, August 20, 1921.

[fol. 225-3] Northern Pacific Railway Company, Valuation Department

Summary Sheet

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound, and Tacoma Divisions in the State of Washington, Exclusively of Land.

Mileage	Val. sec. No.		
173.80	2	Ellensburg to Palmer Junction	$13,551,616.00
14.20	2-B	Cle-Elum to Lakedale—Roslyn Branch	322,981.00
23.50	2-C	Kanaskat to Kerriston and Kangley, Green River Branch	700,930.00
35.74	2-D	Palmer Junction to Auburn	1,719,043.00
103.58	3	Tidewater to Black River (Including Auburn Terminals)	4,545,059.00
43.31		Auburn Terminals comprising all tracks and facilities in Auburn Yards between Sta. Head block 513-57; 972 ft. north of M. P. 21 and Station Head block 353-51.6; 815 ft. north of M. P. 24, with the exception of the wye tracks on Palmer Cut off line. See Exhibit Print No. 13 Included in Val. Sec. #3 ($1,342,131.00).	
137.85	4 & 4A	Tacoma Terminals comprising all tracks and facilities between M. P. 28 at Tidewater and the East Portal of Tunnel #2 at Ruston and the south End of the South Tacoma Yards, M. P. 1 and M. P. 28 at Tidewater. Only N. P. Portion of Joint Property included in Valuation. Section 4-A is included in Estimate. See Print #13	10,228,763.00
36.65	5	Lakeview to Tenino	1,145,757.00
184.70	6	Tenino to Kalama	10,546,219.00
11.69	6-A	Wabash to Mendota-Centralia Eastern Ry.	196,397.00

75.34	7	Kalama to Vancouver	6,491,918.00
0.06	7-A	End of N. P. steel at Vancouver to Washington-Oregon State Line N. P. 1/3, S. P. & S. 2/3	123,394.00
132.03	8	Black River to Woodinville—Via Seattle (Including Seattle Terminals)	10,545,887.00
102.92		Seattle Terminals comprise all facilities lying between Black River Junction at Station 1030-00 and the South end of Bridge Seattle Belt Line at Station 1244-89.5 and from Ballard to Black River Junction described above and that portion of the Seattle Belt Line between Station 1273-18.8 (The junction with the main line) to the South end of Bridge at Station 1244-89.5. The Valuation includes only N. P. Portion of Jointly owned property. All of Seattle Terminals Valuation included in Sections 8, 8B, 8C, 8D and 8E. See Exhibit Print #14 ($9,378,390.00).	
29.09	8-A	Black River to Woodinville via Seattle Belt Line	1,980,327.00
8.31	8-B	Joint Passenger and Industry Tracks in Seattle N. P. Ry. 50%, G. N. Ry. 50%. (Included in Seattle Terminals)	190,973.00
1.70	8-C	Joint Industry tracks in Seattle N. P. Ry. 50%, O. W. R. R. & N. 50%. (Incl. in Seattle Term.)	34,529.00
0.70	8-D	Joint Industry Tracks in Seattle N. P. Ry. 50%, C. M. & St. P. Ry. 50%. (Incl. in Seattle Term.)	26,877.00
1.52	8-E	Joint Industry Tracks in Seattle, East Marginal Way Tracks, N. P. Ry. 25%, C. M. & St. P. Ry. 25%, O. W. R. R. & W. 25%, G. N. Ry. 25%. (Included in Seattle Terminals)	18,112.00
145.51	9	Woodinville to Sumas	6,847,748.00
22.96	9-A	Snohomish to Everett	2,146,609.00
4.48	9-B	Edgecomb to Kruse	132,000.00
1.16	9-C	Joint Industry Tracks in Everett, N. P. Ry. 50%, C. M. & St. P. Ry. 50%.	21,929.00
50.94	10	Palmer Junction to Meeker—Buckley Line	2,003,249.00

[fol. 225-4]

Summary Sheet—Continued

Mileage	Val. sec. No.		
4.24	10-A	Cascade Junction to Spiketown-Burnett Branch	115,621.00
9.69	10-B	Cascade Junction to Wilkeson—Wilkeson Branch	226,250.00
3.39	10-C	Carbonado Junction to Carbonado	92,300.00
9.12	10-D	Carbonado to Fairfax—Wilkeson Branch	538,485.00
6.57	10-E	Crocker to Wingate—Crocker Branch	635,969.00
11.73	10-F	Orting to Electron	374,215.00
51.44	23	Woodinville to Sallal-Snoqualmie Branch	1,704,271.00
44.68	24	Hartford to Monte Cristo	2,535,225.00
33.16	25	Arlington to Darrington—Darrington Branch	1,428,996.00
29.97	26	Wickersham to Bellingham—Bellingham Branch	1,001,999.00
33.83	27	St. Clair to Gate	1,155,154.00
21.11	27-A	Lakeview to Nisqually	494,042.00
113.54	28	Centralia to Moclips—Grays Harbor Line	4,455,381.00
11.52	28-A	Elma to Stimson—Elma Branch	220,987.00
24.39	28-B	Aberdeen Junction to Bay City and Cosmopolis	918,446.00
0.36	28-C	Joint Draw Bridge Line at Hoquiam N. P. Ry. 1/3; C. M. & St. P. Ry. 1/3, O. W. R. R. & N. 1/3	24,071.00
70.69	29	Chehalis to South Bend	2,499,643.00
6.00	30	Plumb to Olympia	164,218.00
83.35	31	Tacoma to Tenino-Point Defiance Line	12,555,732.00
30.34	32	Vancouver Junction to Yacolt	866,957.00
1,794.34			$105,528,279.00

Equipment Accounts West of Ellensburg

Account # 51 Steam Locomotives	$4,511,835	
#53 Freight Train Cars	4,129,062	
#54 Passenger Train Cars	1,125,863	
#57 Work Equipment	720,933	
Interest at 6% for 6 mo. on Equip.	314,631	
		10,802,324.00
Total Lines West of Ellensburg, Excl. of land		116,330,603.00
Total Auburn Terminals Exclusive of land	1,342,131	
Total Tacoma do.	10,228,763	
" Seattle do.	9,378,390	
Total Auburn, Tacoma & Seattle Terminals Exclusive of Land		20,994,284.00
Total Lines West of Ellensburg, Exclusive of land and terminals		95,381,319.00

Office of Valuation Engineer, St. Paul, Minnesota, August 6th, 1921.

[(fol. 225–5] Northern Pacific Railway Company, Valuation Department

Summary Sheet

Estimated Cost of that Portion of the Northern Pacific Railway's Main and Branch Lines West of Ellensburg, Washington, Including all Tracks and Facilities used for Transportation purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Exclusive of Land

Acct.		Cost
#3.	Grading.	$38,628,274.00
5.	Tunnels and subways....	4,431,506.00
6.	Bridges, trestles and culverts	7,358,511.00
8.	Ties	2,761,205.00
9.	Rails	8,670,530.00
10.	Other track material 10-A.	698,658.00
	10-B.	2,282,039.00
11.	Ballast	3,464,317.00
12.	Track laying and surfacing	4,493,540.00
13.	Right of way fences.....	290,510.00
14.	Snow and sand fences and snowsheds	17,920.00
15.	Crossings and signs.....	1,111,051.00
16.	Station and office buildings	2,597,621.00
17.	Roadway buildings	172,507.00
18.	Water stations	340,031.00
19.	Fuel stations	195,001.00
20.	Shop and engine houses..	1,677,274.00
23.	Wharves and docks.....	1,279,943.00
24.	Coal and ore wharves....	117,151.00
26.	Telegraph and telephone lines	448,936.00
27.	Signals and Interlockers..	587,844.00
31.	Power transmission systems	15,375.00
32.	Power distribution systems.	33,776.00
33.	Power line poles and fixtures	5,032.00
34.	Underground conduits....	1,853.00
35.	Miscellaneous structures..	2,336.00
36.	Paving	6,025.00
37.	Roadway machines.....	103,932.00
38.	Roadway small tools.....	161,506.00
39.	Assessments for public improvements	1,505,332.00

Acct.	Cost	
44. Shop machinery	823,928.00	
45. Power plant machinery..	133,350.00	
46. Power Sub-station apparatus	1,597.00	
		$84,418,411.00
Engineering 5%		4,220,923.00
		88,639,334.00
General expenses 4%.....		3,545,577.00
		92,184,911.00
Contingencies 5%		4,609,246.00
		96,794,157.00
Interest 6% (See detail Sheets).....		8,734,122.00
		$105,528,279.00
Acct. #51–Steam Locomotives		4,511,835.00
53–Freight train cars.....		4,129,062.00
54–Passenger " "		1,125,863.00
57–Work equipment		720,933.00
Interest 6% for 6 months on equipment..		314,631.00
Total Lines West of Ellensburg....		$116,330,603.00

Office of Valuation Engineer, St. Paul, Minnesota, July 7th., 1921.
Revised Aug. 2, 1921.

[fol. 225–6] Northern Pacific Railway Company, Valuation Department

Estimated cost of that portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including all Tracks and Facilities used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Division in the State of Washington.

Valuation Section #2, Washington

Account	
#3. Grading	$4,436,113.00
5. Tunnels and subways....	1,990,761.00
6. Bridges, trestles and culverts	831,848.00
8. Ties	409,664.00
9. Rails	1,013,688.00
10. Other Track material 10A.	65,116.00
10B.	272,296.00

Account		
11. Ballast	463,705.00	
12. Tracklaying and Surfacing	477,332.00	
13. Right of way fences	21,323.00	
14. Snow and sand fences and snowsheds	17,920.00	
15. Crossings and signs	7,666.00	
16. Station and office buildings.	115,911.00	
17. Roadway buildings	47,344.00	
18. Water stations	59,371.00	
19. Fuel Stations	75,739.00	
29. Power Plant Buildings 20. Shops and engine houses	201,031.00	
26. Telegraph and telephone lines	73,221.00	
27. Signals and Interlockers.	211,962.00	
31. Power Transmission Systems	31.00	
32. Power Distribution systems	19.00	
33. Power Line poles and fixtures	191.00	
37. Roadway machines	8,975.00	
38. Roadway small tools	15,642.00	
39. Assessments for public improvements	66,867.00	
44. Shop machinery	9,313.00	
Total		$10,893,049.00
Engineering 5%		544,652.00
		11,437,701.00
General Expenses 4%		457,508.00
		11,895,209.00
Contingencies 5%		594,760.00
		12,489,969.00
Interest 17 months @ 6% per year		1,061,647.00
Total		$13,551,616.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1st, 1921

[fol. 225-7] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used by Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section 2-B, Washington

Account			
#3. Grading		$71,670.00	
6. Bridges, Trestles and culverts		10,982.00	
8. Ties		23,700.00	
9. Rails		71,838.00	
10. Other Track Material	10A	8,952.00	
	10B	16,051.00	
11. Ballast		12,812.00	
12. Tracklaying and Surfacing		29,210.00	
13. Right of Way Fences		1,958.00	
15. Crossings and Signs		2,597.00	
16. Station and Office Buildings		6,298.00	
17. Roadway Buildings		396.00	
26. Telegraph and Telephone Lines		1,826.00	
37. Roadway Machines		50.00	
38. Roadway Small Tools		1,278.00	
Total			259,618.00
Engineering 5%			12,981.00
			272,599.00
General Expenses 4%			10,904.00
			283,503.00
Contingencies, 5%			14,175.00
			297,678.00
Interest 17 months @ 6% per Year			25,303.00
Total			$322,981.00

Office of Valuation Engineer, St. Paul, Minnesota. July 1st, 1921.

[fol. 225-8] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines—West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section No. 2-c-Washington

Account			
#3. Grading		$292,631.00	
6. Bridges, trestles and culverts		58,422.00	
8. Ties		37,647.00	
9. Rails		93,634.00	
10. Other Track Material	10A	5,180.00	
	10B	21,547.00	
11. Ballast		8,603.00	
12. Tracklaying and Surfacing		35,157.00	
13. Right of Way Fences		273.00	
15. Crossings and Signs		373.00	
16. Station and Office Buildings		4,765.00	
17. Roadway Buildings		1,916.00	
18. Water Stations		1,057.00	
37. Roadway Machines		100.00	
38. Roadway Small Tools		2,115.00	
			$563,420.00
Engineering 5%			28,171.00
			591,591.00
General Expenses 4%			23,664.00
			615,255.00
Contingencies 5%			30,763.00
			646,018.00
Interest 17 months at 6% per year			54,912.00
Total			$700,930.00

Office of Valuation Engineer, St. Paul, Minn. August 20, 1921.

[fol. 225-9] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section No. 2D—Washington.

Account			
#3. Grading		$628,860.00	
6. Bridges, trestles, and culverts		168,400.00	
8. Ties		51,288.00	
9. Rails		209,849.00	
10. Other Track Material	10A	13,291.00	
	10B	49,513.00	
11. Ballast		54,419.00	
12. Track laying and Surfacing		83,573.00	
13. Right of Way Fences		11,494.00	
15. Crossings and Signs		4,781.00	
16. Station and Office Buildings		11,557.00	
17. Roadway Buildings		9,215.00	
18. Water Stations		14,808.00	
19. Fuel Stations		139.00	
26. Telegraph and Telephone Lines		18,753.00	
27. Signals and Interlockers		47,714.00	
37. Roadway Machines		928.00	
38. Roadway Small Tools		3,217.00	
Total			1,381,799.00
Engineering 5%			69,090.00
			1,450,889.00
General Expenses 4%			58,036.00
			1,508,925.00
Contingencies 5%			75,446.00
			1,584,371.00
Interest 17 months @ 6%			134,672.00
Total			$1,719,043.00

Office of Valuation Engineer, St. Paul, Minn. July 1, 1921.

[fol. 225-10] Northern Pacific Railway Company, Valuation Department

Auburn Terminals

The terminals at Auburn comprise all facilities, exclusive of land, situated in the Auburn Yards between the South Head Block of Main Line Turnout at Station 353-51.6 and the North Head Block of Main Line Turnout, at Station 513-57—Shown in red on attached print marked Sheet 13.

Account		
#3. Grading		$211,251.00
6. Bridges, trestles and culverts		1,974.00
8. Ties		55,754.00
9. Rails		197,189.00
10. Other Track Material	10A	36,720.00
	10B	36,246.00
11. Ballast		48,990.00
12. Track laying and surfacing		92,800.00
13. Right of way fences		621.00
15. Crossings and signs		22,742.00
16. Station and Office Buildings		67,422.00
17. Roadway Buildings		1,213.00
18. Water Stations		29,569.00
19. Fuel stations		17,907.00
20. Shops and Engine Houses		162,315.00
26. Telegraph and Telephone Lines		8,295.00
27. Signals and Interlockers		7,027.00
31. Power Transmission Systems		1,578.00
32. Power Distribution Systems		4,457.00
33. Power Line Poles and Fixtures		1,749.00
37. Roadway Machines		2,004.00
38. Roadway Small Tools		3,906.00
39. Assessments for Public Improvements		5,945.00
44. Shop Machinery		27,879.00
45. Power Plant Machinery		28,329.00
Total		$1,073,882.00
Engineering 5%		53,694.00
		1,127,576.00
General Expenses 4%		45,103.00
		1,172,679.00
Contingencies 5%		58,634.00
		1,231,313.00
Interest 18 months at 6% per year		110,818.00
Total, Exclusive of Land		1,342,131.00

Office of Valuation Engineer, St. Paul, Minn., Aug. 2, 1921.

[fol. 225–10a] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section, Washington, 3

Account		
#3. Grading	$1,221,219.00	
6. Bridges, trestles and culverts	321,195.00	
8. Ties	143,957.00	
9. Rails	533,433.00	
10. Other track material 10A..	69,099.00	
10B..	213,584.00	
11. Ballast	211,579.00	
12. Track laying and surfacing	309,349.00	
13. Right of way fences	10,845.00	
15. Crossings and signs	44,774.00	
16. Station and office buildings	109,544.00	
17. Roadway buildings	3,502.00	
18. Water Stations	34,496.00	
19. Fuel Stations	17,907.00	
20. Shops and engine houses..	162,315.00	
26. Telegraph and telephone lines	32,162.00	
27. Signals and interlockers ..	43,173.00	
31. Power transmission systems	1,578.00	
32. Power distribution systems	4,457.00	
33. Power line poles and fixtures	1,749.00	
37. Roadway machines	3,214.00	
38. Roadway small tools	9,322.00	
39. Assessments for public improvements	77,984.00	
44. Shops machinery	27,879.00	
45. Power Plant machinery ..	28,329.00	
Total		$3,636,645.00
Engineering 5%		181,832.00
		3,818,479.00
General Expense 4%		152,739.00
		3,971,218.00

Account	
Contingencies 5%	198,561.00
	4,169,779.00
Interest 18 months @ 6% per Year	375,280.00
Total	$4,545,059.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1st, 1921.

[fol. 225–11] Northern Pacific Railway Company, Valuation Department

Valuation Sections, Washington, 4 and 4-A, Comprising Tacoma Terminals

The Terminals at Tacoma Comprise all of Valuation Sections 4 and 4-A and the facilities therein, exclusive of Land. The facilities included in Terminals i. e. between Mile Post 28 at Tidewater, and the East Portal of Tunnel No. 2 at Ruston; and the South End of the South Tacoma Yards, Mile Post 1, and Mile Post 28, at Tidewater. Only the Northern Pacific portion of Joint Property included in Valuation Section 4-A is represented in Estimate.

The Limits of Terminals are shown in read on attached print marked sheet 13.

Account	
#3. Grading	$2,012,618.00
5. Tunnels and Subways	442.00
6. Bridges, Trestles and Culverts	188,625.00
8. Ties	190,302.00
9. Rails	587,814.00
10. Other Track material 10-A	100,589.00
10-B	123,709.00
11. Ballast	221,358.00
12. Track laying and surfacing	319,667.00
13. Right of Way Fences	2,635.00
15. Crossings and Signs	331,702.00
16. Station and Office Buildings	894,379.00
17. Roadway Buildings	3,507.00
18. Water Stations	16,294.00
19. Fuel Stations	40,742.00
20. Shops and Engine Houses	996,708.00
23. Wharves and Docks	580,438.00
24. Coal and ore wharves	117,151.00
26. Telegraph and Telephone line	30,929.00
27. Signals and Interlockers	24,889.00

Account		
31. Power Transmission Systems	12,978.00	
32. Power Distribution Systems	26,295.00	
33. Power Line Poles and Fixtures	1,786.00	
34. Underground Conduits	1,853.00	
35. Miscellaneous Structures	2,154.00	
37. Roadway Machines	48,440.00	
38. Roadway Small Tools	12,420.00	
39. Assessments for Public Improvements	371,972.00	
44. Shop Machinery	735,222.00	
45. Power Plant machinery	74,044.00	
46. Power Sub-station Apparatus	1,597.00	
Total		$8,073,259.00
Engineering 5%		403,663.00
		8,476,922.00
General Expenses 4%		339,077.00
		8,815,999.00
Contingencies 5%		440,800.00
		9,256,799.00
Interest 21 months at 6% per year		971,964.00
Total Exclusive of Land		$10,228,763.00

Office of Valuation Engineer, St. Paul, Minn., July 2, 1921.

[fol. 225–12] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section 5, Washington

Account		
#3. Grading	$413,399.00	
6. Bridges, trestles and culverts	88,104.00	
8. Ties	52,005.00	
9. Rails	191,610.00	
10. Other track material 10-A	6,502.00	
10B	46,698.00	
11. Ballast	29,103.00	
12. Track laying and surfacing	66,267.00	
13. Right of way fences	15,988.00	
15. Crossing and signs	4,935.00	
16. Station and office buildings	13,691.00	
17. Roadway buildings	731.00	
18. Water stations	2,898.00	
26. Telegraph and telephone lines	18,985.00	
27. Signals and Interlockers	1,543.00	
37. Roadway Machines	226.00	
38. Roadway Small Tools	3,299.00	
39. Assessment for public improvements	250.00	
Total	$956,234.00	956,234.00
Engineering 5%		47,812.00
		1,004,046.00
General Expenses 4%		40,162.00
		1,044,208.00
Contingencies 5%		52,210.00
		1,096,418.00
Interest 9 months @ 6% per year		49,339.00
Total		1,145,757.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1st, 1921.

[fol. 225–13] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section No. 6, Washington

Account		
#3. Grading	$3,889,311.00	
5. Tunnels and subways	223,401.00	
6. Bridges, trestles and culverts	838,646.00	
8. Ties	226,539.00	
9. Rails	1,008,517.00	
10. Other Track material 10-A	52,837.00	
10-B	300,229.00	
11. Ballast	571,886.00	
12. Track laying and surfacing	475,870.00	
13. Right of way fences	19,781.00	
15. Crossings and signs	63,752.00	
16. Station and Office Buildings	172,858.00	
17. Roadway buildings	12,969.00	
18. Water stations	66,534.00	
19. Fuel stations	27,253.00	
20. Shops and engine houses	131,261.00	
26. Telegraph and telephone lines	43,501.00	
27. Signals and Interlockers	92,221.00	
31. Power transmission systems	788.00	
32. Power distribution systems	1,042.00	
33. Power line poles and fixtures	894.00	
37. Roadway machines	5,947.00	
38. Roadway small tools	16,623.00	
39. Assessments for public improvements	44,616.00	
44. Shop machinery	10,062.00	
45. Power Plant machinery	26,480.00	
Total		$8,323,818.00
Engineering 5%		416,191.00
		8,740,009.00
General Expenses 4%		349,600.00
		9,089,609.00

Account		
Contingencies 5%		454,480.00
		9,544,089.00
Interest 21 months @ 6% per yr.		1,002,130.00
Total		$10,546,219.00

Office of Valuation Engineer, St. Paul, Minn., July 1, 1921.

[fol. 225-14] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising The Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section No. 6-A, Washington

Account			
#3. Grading		$36,925.00	
6. Bridges, trestles and culverts		9,346.00	
8. Ties		13,439.00	
9. Rails		45,733.00	
	10-A..	2,635.00	
10. Other Trk. material	10-B..	2,753.00	
11. Ballast		14,260.00	
12. Track laying and surfacing		22,939.00	
13. Right of way fences		3,077.00	
15. Crossings and signs		412.00	
16. Station and office buildings		263.00	
26. Telegraph and telephone lines		2,212.00	
38. Roadway small tools		1,016.00	
Total			$155,010.00
Engineering 5%			7,751.00
			162,761.00
General Expenses 4%			6,510.00
			169,271.00
Contingencies 5%			8,464.00
			177,735.00
Interest 21 months @ 6% per yr.			18,662.00
Total			196,397.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1, 1921.

[fol. 225-15] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising The Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section #7, Washington

Account		
3. Grading	3,120,298.00	
6. Bridges, trestles and culverts	477,651.00	
8. Ties	111,343.00	
9. Rails	403,664.00	
10-A.	17,514.00	
10. Other track material 10-B.	262,483.00	
11. Ballast	280,773.00	
12. Track laying and surfacing	220,161.00	
13. Right of way fences	13,343.00	
15. Crossings and signs	25,969.00	
16. Station and office buildings	12,557.00	
17. Roadway buildings	3,757.00	
18. Water Stations	20,623.00	
19. Fuel Stations	177.00	
20. Shops and engine houses	1,887.00	
23. Wharves and docks	31,280.00	
26. Telegraph and telephone lines	27,510.00	
27. Signals and interlockers	54,562.00	
37. Roadway Machines	949.00	
38. Roadway small tools	6,781.00	
39. Assessments for public improvements	30,596.00	
Total		5,123,878.00
Engineering 5%		256,194.00
		5,380,072.00
General expenses 4%		215,203.00
		5,595,275.00
Contingencies 5%		279,764.00
		5,875,039.00
Interest 21 months @ 6% per Yr.		616,879.00
Total		$6,491,918.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1st, 1921.

[fol. 225-16] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising The Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section, Washington, 7-A

Account	
#3. Grading	$9.00
6. Bridges, Trestles and Culverts	90,447.00
8. Ties	319.00
9. Rails	304.00
10. Other Track Material 10-A	
10-B	1,015.00
11. Ballast	15.00
12. Track laying and surfacing	446.00
15. Crossings and signs	20.00
27. Signals and Interlockers	4,579.00
37. Roadway Machines	232.00
38. Roadway small tools	5.00
Total	97,391.00
Engineering 5%	4,870.00
	102,261.00
General Expenses 4%	4,090.00
	106,351.00
Contingencies 5%	5,318.00
	111,669.00
Interest 21 months @ 6% per year	11,725.00
	$123,394.00

Office of Valuation Engineer, St. Paul, Minn., July 1, 1921.

[fol. 225-17] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising The Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Washington Valuation Section 8

Account		
#3. Grading	$2,243,460.00	
5. Tunnels and subways	1,033,336.00	
6. Bridges, trestles & culverts	798,771.00	
8. Ties	225,035.00	
9. Rails	589,636.00	
10. Other track material 10-A	89,706.00	
10-B	141,388.00	
11. Ballast	236,244.00	
12. Track laying and surfacing	345,573.00	
13. Right of way fences	7,070.00	
15. Crossings and signs	223,294.00	
16. Station & Office buildings	777,810.00	
17. Roadway buildings	7,488.00	
18. Water Stations	4,926.00	
19. Fuel Stations	972.00	
20. Shops and engine houses	118,508.00	
23. Wharves and docks	660,907.00	
26. Telegraph and telephone lines	25,885.00	
27. Signals and interlockers	68,475.00	
32. Power Distribution system	1,949.00	
33. Power line pole and fixtures	412.00	
37. Roadway machines	7,939.00	
38. Roadway small tools	11,883.00	
39. Assessments for public improvements	661,096.00	
44. Shop Machinery	37,296.00	
45. Power Plant machinery	4,497.00	
Total		$8,323,556.00
Engineering 5%		416,178.00
		8,739,734.00
General Enpenses 4%		349,589.00
		9,089,323.00

Account		
	Contingencies 5%	454,466.00
		9,543,789.00
	Interest 21 months at 6% per year	1,002,098.00
	Total	$10,545,887.00

Office of Valuation Engineer, St. Paul, July 1st, 1921. Revised August 12th, 1921.

[fol. 225–18] Northern Pacific Railway Company, Valuation Department

Seattle Terminals

The terminals at Seattle, shown in red on attached print, marked Sheet 14-A, comprise all facilities, exclusive of land, lying within the following limits: Between Black River Junction at Station 1030-00 to the South end of bridge, Seattle Belt Line, at Station 1244-89.5 and from Ballard to Black River Junction, described above, and that portion of the Seattle Belt Line between Station 1273-18.8 (The Junction with Main Line) to the South end of Bridge at Station 1244-89.5. The Valuation of Terminals include only the Northern Pacific Portion of jointly owned property therein and shown under Valuation Sections 8, 8-B, 8-C, 8-D and 8-E.

Account		
#3.	Grading	$1,934,638.00
5.	Tunnels and Subways.	1,033,336.00
6.	Bridges, trestles and culverts	547,851.00
8	Ties	226,517.00
9.	Rails	496,240.00
10–(a).	Frogs, switches & crossings	76,184.00
10–(b).	Track fastenings and O. M.	114,343.00
11.	Ballast	195,564.00
12.	Track laying & Surfacing	292,009.00
13.	Right of Way fences..	2,689.00
15.	Crossings and signs...	197,480.00
16.	Station & Office Buildings	769,416.00
17.	Roadway buildings....	5,348.00
18.	Water stations.....	1,465.00
19.	Fuel Stations	972.00
20.	Shops & Engine Houses	118,508.00
23.	Wharves and docks....	660,907.00

Account			
26.	Telegraph and telephone lines.....	18,334.00	
27.	Signals and interlockers	68,832.00	
32.	Power distribution systems	1,949.00	
33.	Power line poles and fixtures	412.00	
36.	Paving	6,025.00	
37.	Roadway machines...	6,860.00	
38.	Roadway small tools..	9,457.00	
39.	Assessment for public improvements	574,956.00	
44.	Shop machinery.....	37,296.00	
45.	Power Plant machinery	4,497.00	
	Total		$7,402,085.00
	Engineering 5%.....		370,104.00
			7,772,189.00
	General Expenses 4%.....		310,888.00
			8,083,077.00
	Contingencies 5%.....		404,154.00
			8,487,231.00
	Interest 21 months at 6% per year....		891,159.00
	Total Exclusive of Land.....		$9,378,390.00

Office of Valuation Engineer, St. Paul, Minn., Aug. 6, 1921.

[fol. 225–19] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section 8A—Washington

Account			
#3.	Grading	$811,458.00	
6.	Bridges, trestles and culverts	138,968.00	
8.	Ties	45,932.00	
9.	Rails	139,479.00	
	10A	7,363.00	
10.	Other track material 10B	40,286.00	
11.	Ballast	56,490.00	
12.	Track laying and surfacing	282,740.00	
13.	Right of way fences	8,376.00	
15.	Crossings and signs	9,485.00	
16.	Station and Office Bldgs.	3,893.00	
18.	Water stations	864.00	
26.	Telegraph and Telephone Lines	5,644.00	
27.	Signals and Interlockers	62.00	
37.	Roadway Machines	258.00	
38.	Roadway small tools	2,618.00	
39.	Assessments for public improvements	9,096.00	
	Total		$1,563,012.00
	Engineering 5%		78,151.00
			1,641,163.00
	General Expenses 4%		65,647.00
			1,706,810.00
	Contingencies 5%		85,341.00
			1,792,151.00
	Interest 21 months @ 6% per yr		188,176.00
	Total		1,980,327.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1st, 192

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section, Washington, No. 8-B

Account			
#3.	Grading	$43,148.00	
8.	Ties	18,913.00	
	Rails	33,685.00	
10.	Other Track material 10A.	6,386.00	
	10B.	8,767.00	
11.	Ballast	14,862.00	
12.	Track laying and surfacing	18,715.00	
15.	Crossings and signs	5,523.00	
38.	Roadway small tools	730.00	
	Total		$150,729.00
	Engineering 5%		7,536.00
			158,265.00
	General Expenses 4%		6,331.00
			164,596.00
	Contingencies 5%		8,230.00
			172,826.00
	Interest 21 months at 6% per year		18,147.00
	Total		190,973.00

Office of Valuation Engineer, St. Paul, Minn., July 1, 1921.

[fol. 225–21] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensberg, Washington, Including All Tracks and Facilities Used for Transportation Purposes Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section Washington 8-C

Account		
#3.	Grading	$4,347.00
8.	Ties	4,888.00
9.	Rails	6,917.00
10.	Other Track material 10A	1,123.00
11.	10B	1,008.00
11.	Ballast	1,181.00
12.	Track Laying and Surfacing	2,953.00
15.	Crossings and Signs	4,679.00
38.	Roadway Small Tools	156.00
	Total	$27,252.00
	Engineering 5%	1,363.00
		28,615.00
	General Expenses 4%	1,145.00
		29,760.00
	Contingencies 5%	1,488.00
		31,248.00
	Interest 21 months at 6% per year	3,281.00
	Total	$34,529.00

Office of Valuation Engineer, St. Paul, Minn., July 1, 1921.

[fol. 225–22] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensberg, Washington, Including All Tracks and Facilities Used for Transportation Purposes Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section, Washington, 8-B

Account		
#3. Grading	$1,614.00	
8. Ties	1,681.00	
9. Rails	3,659.00	
10. Other Track Material 10A	361.00	
10B	401.00	
11. Ballast	2,798.00	
12. Track laying and surfacing	4,058.00	
15. Crossings and signs	553.00	
36. Paving	6,025.00	
38. Roadway small tools	63.00	
Total	$21,213.00	
		21,213.00
Engineering 5%		1,061.00
		22,274.00
General Expenses 4%		891.00
		23,165.00
Contingencies 5%		1,158.00
		24,323.00
Interest 21 months at 6% per year		2,554.00
Total		$26,877.00

Office of Valuation Engineer, St. Paul, Minn., July 1, 1921.

[fol. 225–23] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensberg, Washington, Including All Tracks and Facilities Used for Transportation Purposes Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section Washington 8-E

Account			
#3.	Grading	$783.00	
8.	Ties	1,914.00	
9.	Rails	7,137.00	
10.	Other track material 10A	968.00	
	10B	1,059.00	
11.	Ballast	62.00	
12.	Tracklaying and surfacing	1,888.00	
15.	Crossings and signs	347.00	
38.	Roadway small tools	137.00	
	Total		$14,295.00
	Engineering 5%		715.00
			15,010.00
	General Expenses 4%		600.00
			15,610.00
	Contingencies 5%		781.00
			16,391.00
	Interest 21 months at 6% per year		1,721.00
	Total		$18,112.00

Office of Valuation Engineer, St. Paul, Minn., July 1, 1921.

[fol. 225–24] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensberg, Washington, Including All Tracks and Facilities Used for Transportation Purposes Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section, Washington, 9

Account		
#3. Grading	$2,776,623.00	
6. Bridges, trestles and culverts	662,975.00	
8. Ties	206,329.00	
9. Rails	728,297.00	
10. Other Track material, 10A	52,353.00	
10B	152,345.00	
11. Ballast	302,759.00	
12. Track laying and surfacing	384,187.00	
13. Right of way fences	37,238.00	
15. Crossings and signs	24,180.00	
16. Station and office buildings	70,883.00	
17. Roadway buildings	7,267.00	
18. Water Stations	21,190.00	
19. Fuel Stations	20,684.00	
20. Shops and engine houses	18,549.00	
26. Telegraph and telephone lines	31,524.00	
27. Signals and Interlockers	466.00	
32. Power distribution systems	14.00	
37. Roadway machines	12,132.00	
38. Roadway small tools	13,096.00	
39. Assessments for public improvements	30,269.00	
44. Shop machinery	2,194.00	
Total		5,555,554.00
Engineering 5%		277,778.00
		5,833,332.00
General Expenses 4%		233,333.00
		6,066,665.00
Contingencies 5%		303,333.00
		6, 369,998.00
Interest 15 months at 6% per year		477,750.00
Total		$6,847,748.00

Office of Valuation Engineer, St. Paul, Minn., Augu. 20. 1921.

[fol. 225-25] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section No. 9-A, Washington

Account		
3. Grading	$1,235,571.00	
6. Bridges, trestles and culverts	144,312.00	
8. Ties	40,253.00	
9. Rails	94,014.00	
10. Other Track Material 10A	15,822.00	
10B	18,719.00	
11. Ballast	48,097.00	
12. Track laying and surfacing	54,828.00	
13. Right of way fences	2,566.00	
15. Crossings and signs	8,764.00	
16. Station and office buildings	29,771.00	
17. Roadway buildings	271.00	
19. Fuel stations	683.00	
20. Shops and engine houses	94.00	
27. Signals and interlockers	7,669.00	
37. Roadway machines	112.00	
38. Roadway small tools	2,066.00	
26. Telegraph and telephone lines	3,322.00	
27. Signals and interlockers	7,669.00	
37. Roadway machines	112.00	
38. Roadway small tools	2,066.00	
39. Assessments for public improvements	34,602.00	
Total		$1,741,536.00
Engineering 5%		87,077.00
		1,828,613.00
General Expenses 4%		73,145.00
		1,901,758.00
Contingencies 5%		95,088.00
		1,996,846.00
Interest 15 Months @ 6% per year		149,763.00
Total		$2,146,609.00

Office of Valuation Engineer, St. Paul, Minn., July 1, 1921.

[fol. 225-26] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section, Washington, 9-B

Account.		
#3. Grading	$34,894.00	
6. Bridges, Trestles and Culverts	2,621.00	
8. Ties	6,854.00	
9. Rails	26,029.00	
10. Other track material 10-A	1,272.00	
10-B	6,986.00	
11. Ballast	7,885.00	
12. Tracklaying and surfacing	10,754.00	
13. Right of way fences	1,818.00	
15. Crossings and signs	5,334.00	
16. Station and office buildings	997.00	
26. Telegraph and telephone lines	1,244.00	
38. Roadway tools	403.00	
		$107,091.00
Engineering 5%		5,355.00
		112,446.00
General Expenses 4%		4,498.00
		116,944.00
Contingencies 5%		5,847.00
		122,791.00
Interest 15 months at 6% per year		9,209.00
		$132,000.00

Office of Valuation Engineer, St. Paul, Minn., July 1, 1921.

[fol. 225-27] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section, Washington, 9-C

Account.		
#3. Grading	$10,879.00	
8. Ties	1,057.00	
9. Rails	2,191.00	
10. Other track material 10A	212.00	
10B	408.00	
11. Ballast	428.00	
12. Track laying and surfacing	2,512.00	
38. Roadway small tools	104.00	
Total		$17,791.00
Engineering 5%		890.00
		18,681.00
General Expenses 4%		747.00
		19,428.00
Contingencies 5%		971.00
		20,399.00
Interest 15 months at 6% per year		1,530.00
Total		$21,929.00

Office of Valuation Engineer, St. Paul, Minn., Aug. 20, 1921.

[fol. 225-28] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section No. 10, Washington

Account.		
#3. Grading	$649,354.00	
6. Bridges, trestles and culverts	257,623.00	
8. Ties	77,086.00	
9. Rails	233,907.00	
10. Other Track Material 10A	15,486.00	
10B	92,376.00	
11. Ballast	82,994.00	
12. Track laying and surfacing	115,974.00	
13. Right of way fences	14,198.00	
15. Crossings and signs	17,824.00	
16. Station and Office Buildings	21,054.00	
17. Roadway buildings	10,428.00	
18. Water Stations	8,614.00	
19. Fuel Stations	607.00	
20. Shops and engine houses.	9,546.00	
26. Telegraph and telephone lines	13,497.00	
27. Signals and Interlockers	587.00	
37. Roadway machines	821.00	
38. Roadway small tools	4,585.00	
39. Assessments for public improvements	14,108.00	
Total		$1,640,489.00
Engineering 5%		82,024.00
		1,722,513.00
General Expenses 4%		68,901.00
		1,791,414.00
Contingencies 5%		89,571.00
		1,880,985.00
Interest 13 months @ 6% per year		122,264.00
Total		$2,003,249.00

Office of Valuation Engineer, St. Paul, Minn., Aug. 20, 1921.

[fol. 225-29] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section, Washington, 10-A

Account.		
#3.	Grading	$50,609.00
6.	Bridges, trestles and culverts	2,762.00
8.	Ties	6,237.00
9.	Rails	16,549.00
10.	Other Track Material, 10A	1,000.00
	10B	2,722.00
11.	Ballast	2,728.00
12.	Track laying and surfacing	7,067.00
13.	Right-of-way fences	407.00
15.	Crossings and signs	1,548.00
16.	Station and Office buildings	2,522.00
26.	Telegraph and telephone lines	119.00
27.	Signals and interlockers	31.00
38.	Roadway small tools	382.00
	Total	$94,683.00
	Engineering 5%	4,734.00
		99,417.00
	General Expenses 4%	3,977.00
		103,394.00
	Contingencies 5%	5,170.00
		108,564.00
	Interest 13 months at 6% per year	7,057.00
	Total	$115,621.00

Office of Valuation Engineer, St. Paul, Minn., July 1, 1920.

[fol. 225-30] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section, Washington, 10-B

Account.	
#3. Grading	$76,732.00
6. Bridges, Trestles and Culverts	8,188.00
8. Ties	14,688.00
9. Rails	39,973.00
10. Other Track Material 10A	2,909.00
10B	6,226.00
11. Ballast	5,243.00
12. Track Laying and Surfacing	13,969.00
13. Right of Way fences	7,956.00
15. Crossings and Signs	1,223.00
16. Station and Office Buildings	3,878.00
17. Roadway Buildings	1,280.00
18. Water Stations	609.00
26. Telegraph and Telephone Lines	1,382.00
27. Signals and Interlockers	31.00
37. Roadway Machines	120.00
38. Roadway small tools	872.00
Total	185,279.00
Engineering 5%	9,264.00
	194,543.00
General Expenses 4#	7,782.00
	202,325.00
Contingencies 5%	10,116.00
	212,441.00
Interest 13 months @ 3% per yr	13,809.00
	$226,250.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1, 1921.

[fol. 225-31] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section, Washington, 10-C

Account		
#3.	Grading	$38,052.00
6.	Bridges, Trestles and culverts	142.00
8.	Ties	5,522.00
9.	Rails	14,272.00
10.	Other Track Material 10A	633.00
	10B	2,632.00
11.	Ballast	2,599.00
12.	Track laying and surfacing	5,463.00
15.	Crossing and Signs	233.00
16.	Station and Office Buildings	3,035.00
19.	Fuel Stations	98.00
20.	Shops and Engine Houses	1,395.00
26.	Telegraph and telephone lines	1,069.00
27.	Signals and interlockers	31.00
37.	Roadway machines	78.00
38.	Roadway small tools	332.00
	Total	$75,586.00
	Engineering 5%	3,779.00
		79,365.00
	General Expenses 4%	3,175.00
		82,540.00
	Contingencies 5%	4,127.00
		86,667.00
	Interest 13 months @ 6% per year	5,633.00
		92,300.00

Office of Valuation Department, St. Paul, Minnesota, July 1, 1921.

[fol. 225-32] Northern Pacific Railway Company, Valuation Department

Estimated Cost of that Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section, Washington, 10-D

Account		
#3. Grading	$326,112.00	
6. Bridges, Trestles and Culverts	29,442.00	
8. Ties	14,050.00	
9. Rails	33,145.00	
10. Other track materials—10A	1,644.00	
10B	6,093.00	
11. Ballast	6,017.00	
12. Tracklaying and surfacing	13,512.00	
13. Right-of-way fences	691.00	
15. Crossings and Signs	896.00	
16. Station and Office buildings	4,541.00	
17. Roadway Buildings	61.00	
26. Telegraph and Telephone Lines	3,917.00	
27. Signals and Interlockers	31.00	
38. Roadway small tools	821.00	
Total		$440,973.00
Engineering 5%		22,049.00
		463,022.00
General Expenses 4%		18,521.00
		481,543.00
Contingencies 5%		24,077.00
		505,620.00
Interest 13 months @ 6% per year		32,865.00
Total		$538,485.00

Office of Valuation Engineer, St. Paul, Minn., July 1, 1921.

[fol. 225-33] Northern Pacific Railway Company, Valuation Department

Estimated Cost of that Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section, Washington, 10-E

Account		
#3. Grading	$377,273.00	
5. Tunnels and subways	65,201.00	
6. Bridges, Trestles and culverts	16,014.00	
8. Ties	9,877.00	
9. Rails	23,381.00	
10. Other track material 10A	1,579.00	
10B	4,817.00	
11. Ballast	6,415.00	
12. Track laying and surfacing	11,382.00	
13. Right-of-way fences	93.00	
15. Crossings and signs	98.00	
16. Station and office buildings	3,081.00	
17. Roadway buildings	157.00	
18. Water stations	778.00	
26. Telegraph and telephone lines	107.00	
38. Roadway small tools	591.00	
Total		520,804.00
Engineering 5%		26,040.00
		546,844.00
General expenses 4%		21,874.00
		568,718.00
Contingencies 5%		28,436.00
		597,154.00
Interest 13 months at 6% per year		38,815.00
Total		635,969.00

Office of Valuation Engineer, St. Paul, Minn., July 1, 1921.

[fol. 225-34] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound, and Tacoma Divisions in the State of Washington.

Washington Valuation, Section 10-F

Account		
3. Grading	$195,621.00	
6. Bridges, trestles and culverts	20,465.00	
8. Ties	17,057.00	
9. Rails	41,972.00	
10. Other track material—10-A.	870.00	
10-B.	6,417.00	
11. Ballast	3,819.00	
12. Tracklaying and surfacing.	16,259.00	
13. Right of way fences	1,757.00	
15. Crossings and signs	1,159.00	
38. Roadway small tools	1,054.00	
Total		$306,450.00
Engineering 5%		15,323.00
		321,773.00
General Expenses 4%		12,871.00
		334,644.00
Contingencies 5%		16,732.00
		351,376.00
Interest 13 months @ 6% per year		22,839.00
Total		$374,215.00

Office of Valuation Engineer, St. Paul, July 1, 1921.

[fol. 225-35] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes Comprising the Seattle, Puget Sound, and Tacoma Divisions in the State of Washington.

Valuation Section, Washington 23

Account		
Account 3.	Grading	$754,918.00
6.	Bridges, trestles and culverts	141,133.00
8.	Ties	82,515.00
9.	Rails	192,873.00
10.	Other track material, 10A	10,556.00
	10B	29,835.00
11.	Ballast	33,580.00
12.	Track laying and surfacing	78,728.00
13.	Right-of-way fences	9,828.00
15.	Crossings and signs	4,205.00
16.	Station and office buildings	21,907.00
17.	Roadway buildings	3,938.00
18.	Water stations	4,374.00
19.	Fuel stations	626.00
20.	Shops and engine houses	867.00
26.	Telegraph and telephone lines	3,764.00
27.	Signals and interlockers	242.00
37.	Roadway machines	708.00
38.	Roadway small tools	4,635.00
39.	Assessments for public improvements	3,437.00
	Total	$1,382,669.00
	Engineering, 5%	69,133.00
		$1,451,802.00
	General Expenses, 4%	58,072.00
		1,509,874.00
	Contingencies, 5%	75,494.00
		1,585,368.00
	Interest 15 months at 6% per year	118,903.00
	Total	$1,704,271.00

Office of Valuation Engineer, St. Paul, Minn., July 1, 1921.

timated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including all Tracks and Facilities Used for Transportation Purposes—Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section, Washington, 24

count		
ecount 3.	Grading	$1,449,638.00
5.	Tunnels and subways	119,026.00
6.	Bridges, trestles and culverts	107,822.00
8.	Ties	71,649.00
9.	Rails	167,830.00
10.	Other track material, 10A	4,536.00
	10B	28,167.00
11.	Ballast	23,229.00
12.	Track laying and surfacing	73,342.00
13.	Right-of-way fences	1,225.00
15.	Crossings and signs	2,265.00
16.	Station and office buildings	5,429.00
17.	Roadway buildings	2,527.00
18.	Water stations	7,265.00
20.	Shops and engine houses	4,984.00
26.	Telegraph and telephone lines	11,669.00
27.	Signals and interlockers	31.00
37.	Roadway machines	171.00
38.	Roadway small tools	4,020.00
39.	Assessments for public improvements	1,070.00
	Total	$2,085,925.00
	Engineering, 5%	104,296.00
		2,190,221.00
	General Expenses, 4%	87,609.00
		2,277,830.00
	Contingencies, 5%	113,892.00
		2,391,722.00
	Interest 12 months at 6% per year	143,503.00
	Total	$2,535,225.00

[fol. 225-37] Northern Pacific Railway Company Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section, Washington, 25

Account		
#3. Grading	$699,950.00	
6. Bridges, Trestles and Culverts	81,943.00	
8. Ties	51,557.00	
9. Rails	170,016.00	
10. Other Track Material, 10A	7,584.00	
10B	33,111.00	
11. Ballast	34,783.00	
12. Track laying and surfacing	62,183.00	
13. Right of way fence	8,753.00	
15. Crossings and signs	4,342.00	
16. Station and office buildings	4,027.00	
17. Roadway buildings	5,128.00	
18. Water stations	6,785.00	
19. Fuel stations	871.00	
26. Telegraph and Telephone lines	6,344.00	
27. Signals and Interlockers	62.00	
37. Roadway machines	997.00	
38. Roadway small tools	2,984.00	
44. Shop machinery	48.00	
Total		$1,181,318.00
Engineering 5%		59,066.00
		1,240,384.00
General Expenses 4%		49,615.00
		1,284,999.00
Contingencies 5%		64,500.00
		1,354,499.00
Interest 11 months at 6% per year		74,497.00
Total		$1,428,996.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1, 1921.

[fol. 225–38] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section, Washington, 26

Account		
#3. Grading	$239,882.00	
6. Bridges, trestles and culverts	117,183.00	
8. Ties	54,026.00	
9. Rails	149,505.00	
10. Other track material 10A..	11,772.00	
10B..	35,720.00	
11. Ballast	36,312.00	
12. Tracklaying and surfacing	69,773.00	
13. Right of way fences	2,060.00	
15. Crossings and signs	13,846.00	
16. Station and office buildings	25,001.00	
17. Roadway and buildings	2,051.00	
18. Water Stations	1,674.00	
19. Fuel Stations	26.00	
20. Shops and engine houses	2,269.00	
26. Telegraph and telephone lines	4,639.00	
37. Roadway machines	410.00	
38. Roadway small tools	2,697.00	
39. Assessments for public improvements	54,916.00	
44. Shop machinery	660.00	
Total		$824,422.00
Engineering 5%		41,221.00
		865,643.00
General expenses 4%		34,626.00
		900,269.00
Contingencies 5%		45,013.00
		945,282.00
Interest 12 months at 6% per year		56,717.00
Total		$1,001,999.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1, 1921.

[fol. 225–39] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section No. 27, Washington

Account	
#3. Grading	$324,957.00
5. Tunnels and subways	114.00
6. Bridges, trestles and culverts	48,301.00
8. Ties	48,170.00
9. Rails	146,387.00
10. Other Track Material 10A	6,068.00
10B	29,342.00
11. Ballast	58,951.00
12. Track Laying and surfacing	69,388.00
13. Right of Way fences	12,745.00
15. Crossings and signs	151,094.00
16. Station and office buildings	20,342.00
17. Roadway buildings	4,923.00
18. Water Stations	4,105.00
19. Fuel stations	191.00
20. Shops and engine houses	2,441.00
26. Telegraph and telephone lines	8,627.00
27. Signals and Interlockers	2,493.00
37. Roadway machines	444.00
38. Roadway small tools	3,043.00
39. Assessments for public improvements	17,273.00
44. Shop machinery	88.00
Total	959,487.00
Engineering 5%	47,974.00
	1,007,461.00
General Expenses 4%	40,298.00
	1,047,759.00
Contingencies 5%	52,388.00
	1,100,147.00
Interest, 10 months @ 6% per year	55,007.00
Total	1,155,154.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1st, 1921.

[fol. 225-40] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section No. 27A, Washington

Account		
#3. Grading	$132,610.00	
6. Bridges, trestles and culverts	1,222.00	
8. Ties	38,113.00	
9. Rails	114,245.00	
10. Other track material 10A	10,432.00	
10B	19,882.00	
11. Ballast	8,057.00	
12. Track laying and surfacing	32,076.00	
13. Right of way fences	5,034.00	
15. Crossings and signs	3,929.00	
16. Station and office buildings	38,654.00	
17. Roadway buildings	1,528.00	
26. Telegraph and telephone lines	4,481.00	
27. Signals and interlockers	31.00	
37. Roadway machines	127.00	
38. Roadway small tools	1,900.00	
Total		412,321.00
Engineering 5%		20,616.00
		432,937.00
General Expenses 4%		17,317.00
		450,254.00
Contingencies 5#		22,513.00
		472,767.00
Interest 9 Months at —% per year		21,275.00
Total		$494,042

Office of Valuation Engineer, St. Paul, Minn., July 1, 1921.

[fol. 225-41] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section, Washington, #28

Account		
#3. Grading	1,456,859.00	
6. Bridges, trestles and culverts	547,983.00	
8. Ties	129,084.00	
9. Rails	468,857.00	
10A.	57,565.00	
10. Other track material 10B.	72,591.00	
11. Ballast	281,359.00	
12. Track laying and surfacing	288,922.00	
13. Right of way fences	24,153.00	
15. Crossings and signs	27,167.00	
16. Station and Office buildings	96,501.00	
17. Roadway buildings	15,434.00	
18. Water stations	15,704.00	
19. Fuel Stations	6,721.00	
20. Shop and engine houses	2,066.00	
26. Telegraph and telephone lines	25,608.00	
27. Signals and Interlockers	16,777.00	
37. Roadway machines	1,820.00	
38. Roadway small tools	10,219.00	
39. Assessments for public improvements	35,272.00	
44. Shop machinery	659.00	
Total		3,581,321.00
Engineering 5%		179,066.00
		3,760,387.00
General Expenses 4%		150,415.00
		3,910,802.00
Contingencies 5%		195,540.00
		4,106,342.00
Interest 17 months @ 6% per Yr		349,039.00
Total		$4,455,381.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1st, 1921.

[fol. 225-42] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section #28-A, Washington

Account		
#3. Grading	$67,495.00	
6. Bridges, trestles and culverts	22,466.00	
8. Ties	12,571.00	
9. Rails	43,558.00	
10. Other track material 10A.	1,932.00	
10B.	4,514.00	
11. Ballast	265.00	
12. Track laying and surfacing	17,469.00	
13. Right of way fences	1,185.00	
15. Crossings and signs	654.00	
16. Station and office buildings	201.00	
19. Fuel stations	219.00	
20. Shops and engine houses	3,832.00	
37. Roadway machines	234.00	
38. Roadway small tools	1,038.00	
Total		177,633.00
Engineering 5%		8,882.00
		186,515.00
General Expenses 4%		7,461.00
		193,976.00
Contingencies 5%		9,699.00
		203,675.00
Interest 17 months @ 6% per Year		17,312.00
Total		$220,987.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1st, 1921.

[fol. 225-43] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising The Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section No. 28-B, Washington

Account		
No. 3.	Grading	332,550.00
6.	Bridges, trestles & Culverts	138,783.00
8.	Ties	42,514.00
9.	Rails	85,202.00
10.	Other track material 10-A	6,992.00
	10-B	11,468.00
11.	Ballast	27,509.00
12.	Track laying and surfacing	55,222.00
13.	Right of way fences	429.00
15.	Crossings & Signs	4,890.00
16.	Station and Office buildings	10,314.00
17.	Roadway buildings	4,463.00
18.	Water stations	2,045.00
19.	Fuel Stations	327.00
20.	Shops & Engine houses	4,986.00
23.	Wharves and Docks	7,318.00
26.	Telegraph and telephone lines	931.00
37.	Roadway machines	127.00
38.	Roadway small tools	2,195.00
	Total	738,265.00
	Engineering 5%	36,913.00
		775,178.00
	General expenses 4%	31,007.00
		806,185.00
	Contingencies 5%	40,309.00
		846,494.00
	Interest 17 Months @ 6% per Yr.	71,952.00
	Total	$918,446.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1st, 1921.

[fol. 225-44] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising The Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section #28-C, Washington

Account		
3. Grading	1,943.00	
6. Bridges, trestles and culverts.	12,411.00	
8. Ties	621.00	
9. Rails	1,762.00	
10-A.	471.00	
10. Other Track Material 10-B.	291.00	
11. Ballast	485.00	
12. Track laying and surfacing.	1,311.00	
15. Crossings and signs	22.00	
28. Roadway small tools	32.00	
Total		19,349.00
Engineering 5%		967.00
		20,316.00
General expenses 4%		813.00
		21,129.00
Contingencies 5%		1,056.00
		22,185.00
Interest 17 months @ 6% Per Yr.		1,886.00
Total		$24,071.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1st, 1921.

[fol. 225-45] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section 29—Washington

Account			
#3.	Grading	$811,752.00	
6.	Bridges, trestles and culverts	287,144.00	
8.	Ties	94,681.00	
9.	Rails	306,743.00	
10.	Other Track Material (10A)	19,289.00	
	Other Track Material (10B)	58,559.00	
11.	Ballast	122,266.00	
12.	Tracklaying and surfacing	162,874.00	
13.	Right of way fences	19,631.00	
15.	Crossings and signs	12,996.00	
16.	Station and office buildings	50,117.00	
17.	Roadway buildings	10,307.00	
18.	Water Stations	16,824.00	
19.	Fuel Stations	673.00	
20.	Shops and engine houses	10,857.00	
26.	Telegraph and telephone lines	11,151.00	
27.	Signals and interlockers	279.00	
37.	Roadway machines	1,142.00	
38.	Roadway small tools	6,361.00	
39.	Assessments for public improvements	42,970.00	
44.	Shop machinery	377.00	
	Total		2,046,993.00
	Engineering 5%		102,350.00
			2,149,343.00
	General Expenses 4%		85,974.00
			2,235,317.00
	Contingencies 5%		111,766.00
			2,347,083.00
	Interest 13 months at 6% per year		152,560.00
	Total		$2,499,643.00

Office of Valuation Engineer, St. Paul, Minn., July 1, 1921.

[fol. 225-46] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Valuation Section No. 30—Washington

Account			
3. Grading		31,923.00	
6. Bridges, trestles & culverts.		45,155.00	
8. Ties		10,834.00	
9. Rails		19,673.00	
10. Other Track Material	10A	1,261.00	
	10B	2,513.00	
11. Ballast		1,316.00	
12. Tracklaying and Surfacing		14,034.00	
15. Crossings & Signs		205.00	
16. Station & Office Buildings		1,871.00	
17. Roadway Buildings		425.00	
18. Water stations		1,781.00	
20. Shop & Engine houses		3,585.00	
38. Roadway small tools		539.00	
Total		135,115.00	135,115.00
Engineering 5%			6,756.00
			141,871.00
General expenses 4%			5,675.00
			147,546.00
Contingencies 5%			7,377.00
			154,923.00
Interest 12 months @ 6% per Yr			9,295.00
Total			164,218.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1, 1921.

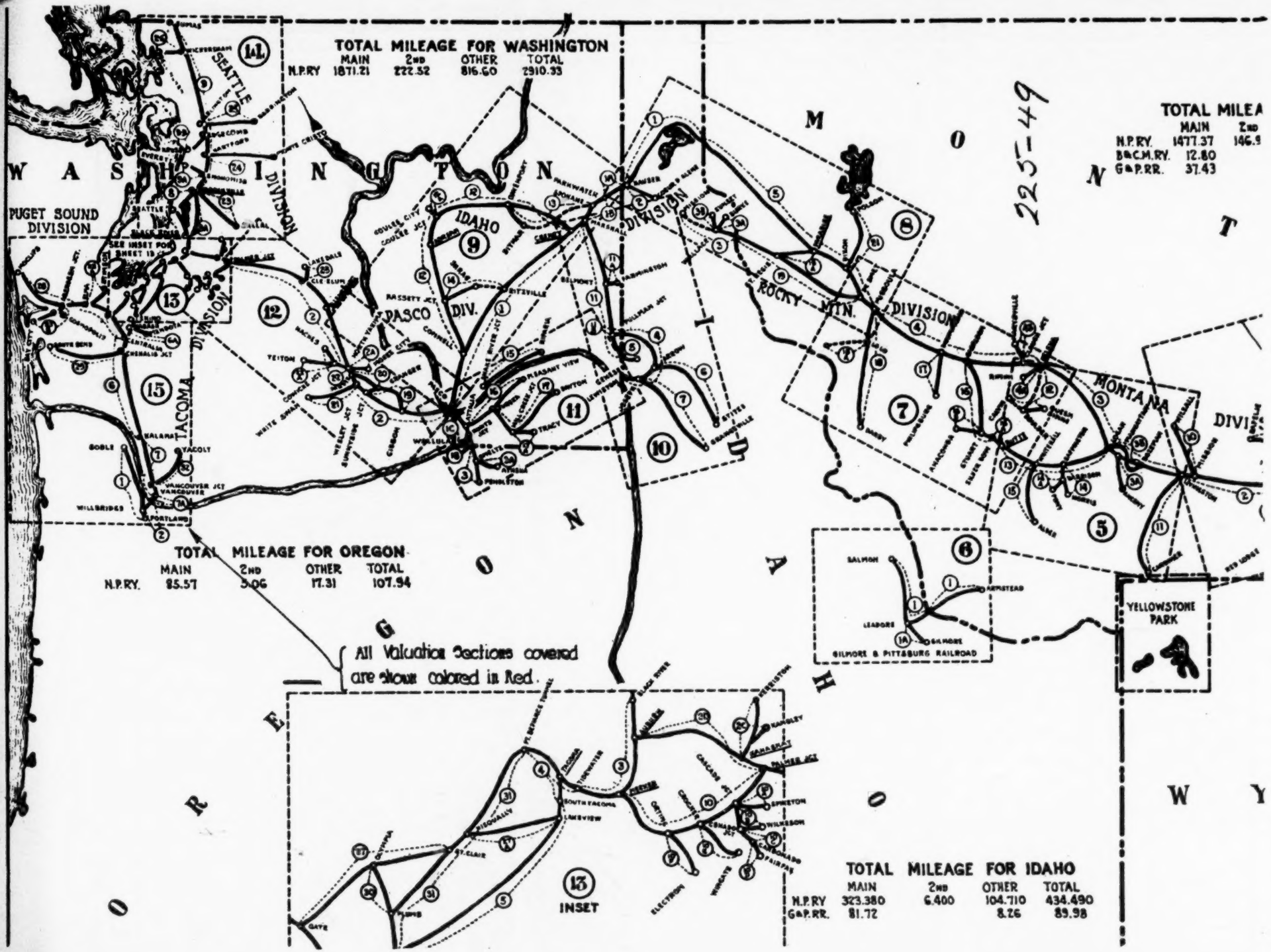
[fol. 225–47] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington

Valuation Section No. 31, Washington

Account		
#3. Grading	$6,991,615.00	
5. Tunnels and subways	972,025.00	
6. Bridges, trestles and culverts	596,936.00	
8. Ties	122,662.00	
9. Rails	485,653.00	
10. Other track material 10A.	14,437.00	
10B.	133,141.00	
11. Ballast	162,919.00	
12. Track laying and surfacing	182,500.00	
13. Right of way fences	14,018.00	
15. Crossings and signs	89,060.00	
16. Station and office buildings	53,506.00	
17. Roadway buildings	9,406.00	
18. Water stations	19,762.00	
26. Telephone and telegraph lines	30,315.00	
27. Signals and interlockers	9,341.00	
35. Miscellaneous structures	182.00	
37. Roadway machines	7,022.00	
38. Roadway small tools	7,502.00	
39. Assessments for public improvements	7,365.00	
Total		9,909,867.00
Engineering 5%		495,493.00
		10,405,360.00
General Expenses 4%		416,214.00
		10,821,574.00
Contingencies 5%		541,079.00
		11,362,653.00
Interest 21 months at 6% per Year		1,193,079.00
Total		$12,555,732.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1, 1921.


TOTAL MILEAGE FOR WASHINGTON
MAIN 2ND OTHER TOTAL
N.P.RY 1871.21 222.52 816.60 2910.33
W A S H I N G T O N
PUGET SOUND DIVISION
SEATTLE
DIVISION
TACOMA
DIVISION
IDAHO
DIVISION
PASCO
DIV.
ROCKY MTN.
DIVISION
MONTANA
DIVISION
O R E G O N
TOTAL MILEAGE FOR OREGON
MAIN 2ND OTHER TOTAL
N.P.RY. 85.57 5.06 17.31 107.94
All Valuation Sections covered are shown colored in Red.
INSET
TOTAL MILEAGE FOR IDAHO
MAIN 2ND OTHER TOTAL
N.P.RY 323.380 6.400 104.710 434.490
G&P.RR. 81.72 8.26 89.98
TOTAL MILEA
MAIN 2ND
N.P.RY. 1477.37 146.9
B&C.M.RY. 12.80
G&P.RR. 37.43
YELLOWSTONE PARK
GILMORE & PITTSBURG RAILROAD
225-49

225-50

SHEET 12

WASHINGTON

VALUATION SECTION LIMITS
WASHINGTON 2, 2A, 2B, 19, 20, 21, 22, 22A

Joins Sheet No. 13

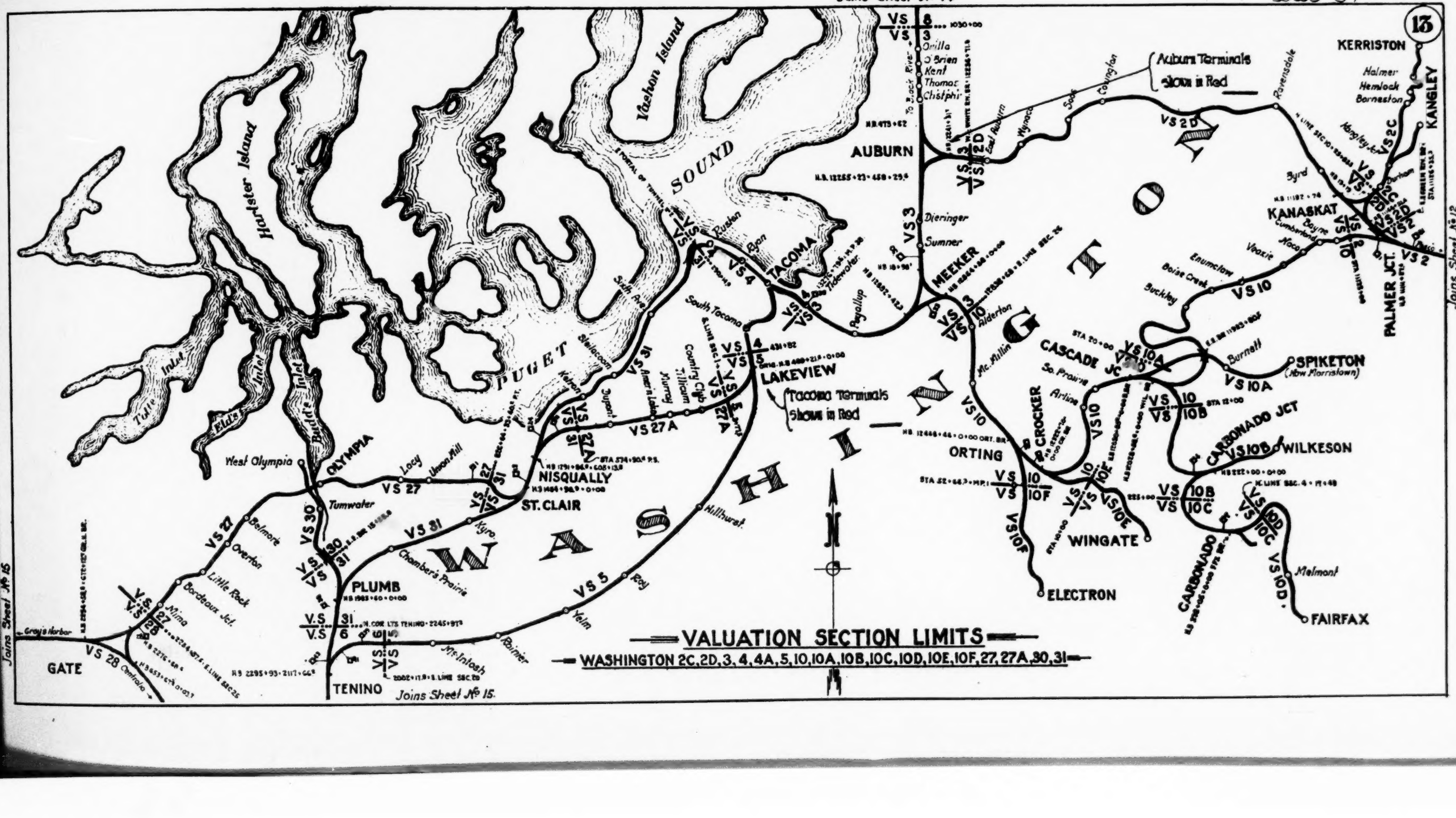
Joins Sheet No. 9

Joins Sheet No. 11.

VS 2D
VS 2
PALMER JCT.
VS 2
VS 2
VS 2
Lemolo
Eagle Gorge
Humphrey
Maywood
Nagrom
Hot Springs
Lester
Kennedy
Gorup
Stampede
Martin
Upham
Easton
Talmadge
Nelson
Baker
VS 2B
LAKEDALE
Beckman
Ronald
Roslyn
Mine #5
VS 2B
VS 2
CLE-ELUM
Teanaway
Bristol
Kountze
Dudley
Thorp
Shoaskin
Ellensburg
Thrall
Indio
Umtanum
Wymer
Roza
Hillside
Pomona
Selah
VS 2
NACHES
Banlow
Mc Phee
Sinclair Park
Power House
Coleen
Eschbach
Gleed
Jacobson
VS 22
VS 22A
TIETON
Earle Spur
Cowiche
Heikel
Spitzenberg
Florence
VS 22A
VS 22
COWICHE JCT
VS 22
VS 2
NORTH YAKIMA
VS 2A
MOXEE CITY
Avery
Peacock
Birchfield
Eugene
Mc Shane
VS 20
Ellis
Donald
Sawyer
Flint
Holden
Buena
Squier
Keck
Zillah
Gilliland
Rammerman
Boone
Dalton
VS 20
VS 19
GRANGER
Outlook
Sunnyside
Lichty
Grandview
Bone
Wilcox
Elco
Cow Force
Dober
Whitstran
VS 19
VS 2
GIBBON
Chandler
Kiona
Rome
Badger
VS 2
Erie
Yisla
Kennewick
PASCO VS 1
VS 1
VS 1
VS 1
VS 21
Ashue
Perron
Norrah
WHITE SWAN
WESLEY JCT
Yelbonat
Toppenish
SUNNYSIDE JCT.
Alfalfa
Saltus
Empire
Mabton
Byron
Prosser
VS 2
VS 2
VS 2

Joins Sheet № 14

225-51

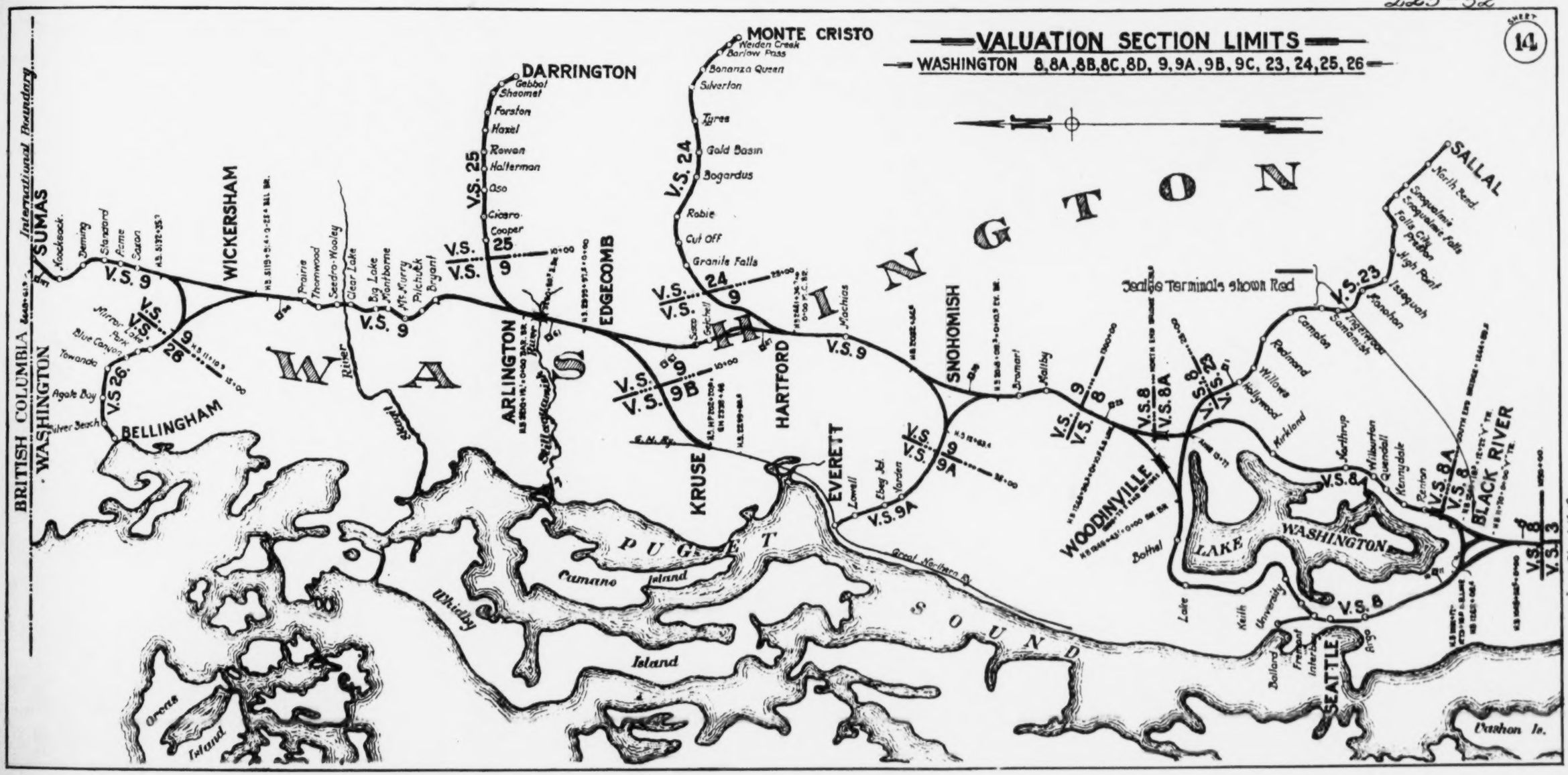


Joins Sheet № 12

Joins Sheet № 15

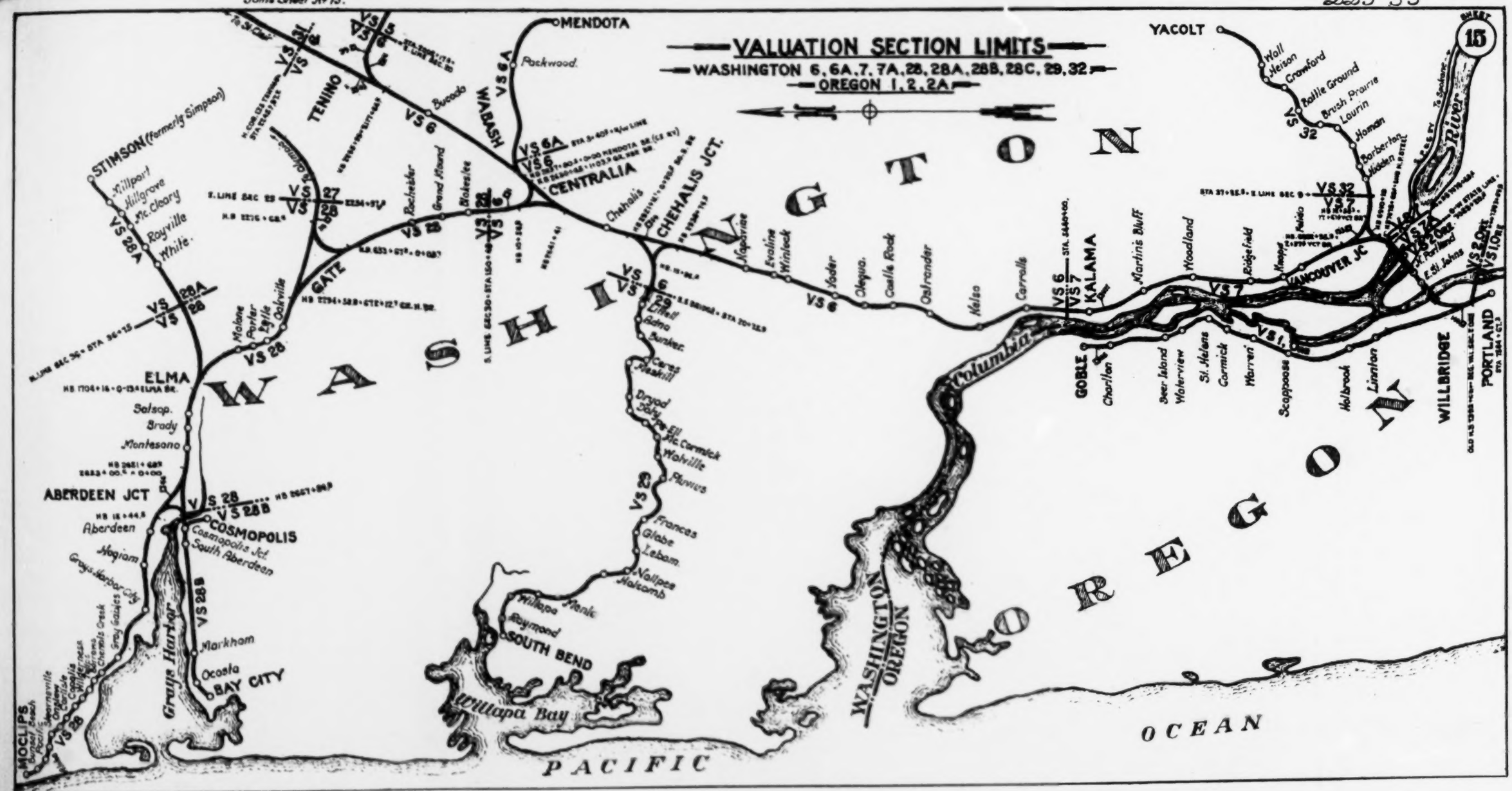
Joins Sheet № 15.

225-52



VALUATION SECTION LIMITS
WASHINGTON 8,8A,8B,8C,8D, 9,9A,9B,9C, 23, 24,25,26
SHEET 14
WASHINGTON
BRITISH COLUMBIA
International Boundary
SUMAS
Kooksack
Deming
Standard
Acme
Saxon
WICKERSHAM
Prairie
Thornwood
Seedro-Wooley
Clear Lake
Big Lake
Montborne
Mt. Murry
Pilchuck
Bryant
DARRINGTON
Gebbot
Sheomet
Forston
Hazel
Rowan
Halterman
Oso
Cicero
Cooper
MONTE CRISTO
Weiden Creek
Barlow Pass
Bonanza Queen
Silverton
Tyree
Gold Basin
Bogardus
Robie
Cut Off
Granite Falls
Machias
SNOHOMISH
Bromart
Maltby
Seattle Terminals shown Red
SALLAL
North Bend
Snoqualmie
Snoqualmie Falls
Falls City
Preston
High Point
Issaquah
Monohon
Ingelwood
Samamish
Campton
Redmond
Willows
Hollywood
Kirkland
Northrup
Wilburton
Quendall
Kennydale
Renton
BLACK RIVER
Joins Sheet No 13.
WOODINVILLE
Bothel
LAKE WASHINGTON
Lake
Keith
University
Bollard
Fremont
Interbay
Argo
SEATTLE
Vashon Is.
EDGECOMB
Sisco
Gelchell
HARTFORD
ARLINGTON
Stillaguamish River
KRUSE
EVERETT
Lowell
Ebey Jct.
Yarden
Great Northern Ry.
PUGET SOUND
Camano Island
Whidby Island
Orcas Island
BELLINGHAM
Mirror Lake
Park
Blue Canyon
Towanda
Agate Bay
Silver Beach
V.S. 9
V.S. 26
V.S. 25
V.S. 24
V.S. 9B
V.S. 9A
V.S. 8
V.S. 8A
V.S. 23
V.S. 3

225-53



Joins Sheet No 13.
VALUATION SECTION LIMITS
WASHINGTON 6, 6A, 7, 7A, 28, 28A, 28B, 28C, 29, 32
OREGON 1, 2, 2A
SHEET 15
WASHINGTON
OREGON
PACIFIC
OCEAN
MENDOTA
Packwood
CENTRALIA
CHEHALIS JCT.
Chehalis
Napavine
Evaline
Winlock
Yoder
Olequa
Castle Rock
Ostrander
Kelso
Carrolls
KALAMA
Martin's Bluff
Woodland
Ridgefield
Keeper
Felida
VANCOUVER JC
YACOLT
Wall
Heison
Crawford
Battle Ground
Brush Prairie
Lourin
Homan
Barberton
Hidden
Columbia
GOBLE
Charlton
Beer Island
Waterview
St. Helens
Cormick
Warren
Scappoose
Holbrook
Linnton
WILLBRIDGE
PORTLAND
E. St. Johns
N. Portland
River
WASHINGTON
OREGON
STIMSON (Formerly Simpson)
Millport
Hillgrove
McCleary
Royville
White
TENINO
Bucoda
WABASH
GATE
Rochester
Grand Mound
Blakeslee
Malone
Porter
Bytle
Oakville
ELMA
Satsop
Brady
Montesano
ABERDEEN JCT
Aberdeen
Hogiam
Grays Harbor City
COSMOPOLIS
Cosmopolis Jct.
South Aberdeen
Grays Harbor
Markham
Ocosta
BAY CITY
MOCLIPS
Bunsel Beach
Pacific
Stearnsville
Onslow
Carlisle
Capalis
Wilderness
Chemals Creek
Gray Gables
Littell
Adna
Bunker
Ceres
Meskill
Dryad
Doty
Pe Ell
McCormick
Walville
Pluvius
Frances
Globe
Lebam
Nallpee
Holcomb
Menlo
Willapa
Raymond
SOUTH BEND
Willapa Bay
VS 6
VS 6A
VS 7
VS 7A
VS 28
VS 28A
VS 28B
VS 29
VS 32
VS 1, Ore
VS 2, Ore
VS 1, Ore

[fol. 225-48] Northern Pacific Railway Company, Valuation Department

Estimated Cost of That Portion of the Northern Pacific Railway Company's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Tacoma and Puget Sound Divisions in the State of Washington

Valuation Section #32, Washington

Account		
#3. Grading	$332,569.00	
5. Subways and tunnels	27,200.00	
6. Bridges, trestles and culverts	44,080.00	
8. Ties	44,632.00	
9. Rails	123,899.00	
10. Other Track material 10A.	4,361.00	
10B.	20,377.00	
11. Ballast	24,152.00	
12. Track laying and surfacing	53,913.00	
13. Right of way fences	8,742.00	
15. Crossings and signs	4,295.00	
16. Station and office buildings	6,463.00	
17. Roadway buildings	2,238.00	
18. Water stations	6,650.00	
19. Fuel stations	346.00	
20. Shops and engine houses	93.00	
26. Telegraph and telephone lines	4,598.00	
27. Signals and interlockers	62.00	
37. Roadway machines	209.00	
38. Roadway small tools	2,730.00	
39. Assessments for public improvements	1,573.00	
44. Shop machinery	130.00	
Total		713,312.00
Engineering 5%		35,666.00
		748,978.00
General expenses 4%		29,959.00
		778,937.00
Contingencies 5%		38,947.00
		817,884.00
Interest 12 months @ 6% per Year		49,073.00
Total		$866,957.00

Office of Valuation Engineer, St. Paul, Minnesota, July 1, 1921.

(Here follows five maps, marked side folio pages 225-49, 225-50, 225-51, 225-52, and 225-53.)

[fol. 226] N. P. Exhibit No. 36

Special 190

Northern Pacific Railway Company

Statement Showing Washington Intrastate Traffic on Logs, Year 1919, and December, 1920, and Interstate Traffic for the Year 1919, January to August, 1920, and September to December, 1920, Also Revenue Ton-miles for Years 1919 and 1920

Logs, Washington, Intrastate

	Year 1919	December, 1920
Number of Loaded Cars	90,883	4,725
Number of Loaded Car Miles	2,747,496	140,980
Total Net Tons	3,117,832	162,096
Total Revenue	$1,066,291.44	$69,663.10

Logs, Washington, Interstate

	Year 1919	January to August, 1920	September to December, 1920
Number of Loaded Cars	122	34	3
Number of Loaded Car Miles	2,565	960	57
Total Net Tons	4,363	970	130
Total Revenue	$714.57	$338.41	$19.41

Revenue Ton-miles, Washington, Intrastate & Interstate

	Year 1919	Year 1920
Intrastate	413,321,522	452,784,759
Interstate	1,204,563,530	1,186,576,969
Total	1,617,885,052	1,639,361,728

Office of Auditor Freight Receipts, St. Paul, Minn., May 12th, 1921.
AFR—S—1578.

(Here follows N. P. Exhibits Nos. 37 and 38, marked side folio pages 227 and 228.)

[fol. 227]

N. P. Exhibit No. 37

Special #240

Washington Log Rate Case (5159)

Northern Pacific Railway Company

Statement of Operated Mileage (Single Track) and Total Mileage of Tracks Operated as of Dec. 31, 1920

	State of Wisconsin	State of Minnesota	Province of Manitoba	State of North Dakota	State of Montana	State of Idaho	State of Washington	State of Oregon	Entire line
Road mileage operated (I. C. C. report—schedule 411) (Exclusive of commercial spurs incl. in above schedule):									
Main line	29.03	591.25	.....	377.02	838.87	83.64	679.02	9.78	2,608.61
Branch lines	107.97	403.97	73.70	1,146.16	771.87	239.93	1,258.12	44.96	4,046.68
Total	137.00	995.22	73.70	1,523.18	1,610.74	323.57	1,937.14	54.74	6,655.29
Prop'n of main line to total main line entire line	1.11%	22.67%	.....	14.45%	32.16%	3.21%	26.03%	.37%	100.00%
Prop'n of branch lines to total branch lines entire line	2.67%	9.98%	1.82%	28.32%	19.08%	5.93%	31.09%	1.11%	100.00%
Prop'n of total state to total entire line	2.06%	14.95%	1.11%	22.89%	24.20%	4.86%	29.11%	.82%	100.00%
Prop'n of main and branch line mileage in each state:									
Main line	21.19%	59.41%	.....	24.75%	52.08%	25.85%	35.05%	17.87%	39.20%
Branch lines	78.81%	40.59%	100.00%	75.25%	47.92%	74.15%	64.95%	82.13%	60.80%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Total tracks operated (I. C. C. report—schedule 411):									
Main line	117.75	1,540.52	.....	647.17	1,437.60	133.97	1,521.31	48.85	5,447.17
Branch lines	118.94	513.15	84.81	1,276.75	958.31	301.72	1,706.28	51.14	5,011.10
Total	236.69	2,053.67	84.81	1,923.92	2,395.91	435.69	3,227.59	99.99	10,458.27
Prop'n of main line to total main line entire line	2.16%	28.28%	.....	11.88%	26.39%	2.46%	27.93%	.90%	100.00%
Prop'n of branch lines to total branch lines entire line	2.37%	10.24%	1.69%	25.48%	19.14%	6.02%	34.04%	1.02%	100.00%
Prop'n of total state to total entire line	2.26%	19.64%	.81%	18.40%	22.91%	4.16%	30.86%	.96%	100.00%
Prop'n of main and branch line mileage in each state:									
Main line	49.75%	75.01%	.....	33.64%	59.99%	30.75%	47.14%	48.85%	52.09%
Branch lines	50.25%	24.99%	100.00%	66.36%	40.01%	69.25%	52.86%	51.15%	47.91%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Note.—Lake terminals, Twin City terminals and Puget Sound division included in main line. Ashland line, Butte line Logan to Garrison, Mont., and De Smet—Paradise via Evaro are included as branch lines.

Office of Asst. General Auditor. Division of Statistics, August 25th, 1921.

[fol. 228]

N. P. Exhibit No. 38

Special #241

(Washington Log Rate Case #5159)

Northern Pacific Railway Company

Whole Road Freight Operation

Statement Showing Cost of Freight Operation by Main Line and Branch Lines for Three Months Ended November 30th, 1920

	Main line, incl. termls.*	Cost per est. loaded car ml. (in cts.)	Cost per 100 net ton mls. (in cts.)	Cost per 100 gross ton mls. (in cts.)	Branch lines	Cost per est. loaded car ml. (in cts.)	Cost per 100 net ton mls. (in cts.)	Cost per 100 gross ton mls. (in cts.)	Ratio of branch line to main line	Terminals: Head of Lakes and Twin Cities	Terminals: Puget Sound Division
Station service	$1,258,613	1.30	5.87	2.79	$286,105	2.84	14.02	6.32	....	.....	.....
Yard service	1,963,661	2.02	9.15	4.34	250,782	2.49	12.28	5.54	....	.....	.....
Engine service	2,584,779	2.66	12.04	5.72	711,712	7.06	34.86	15.72	....	.....	.....
Train service	1,086,512	1.12	5.06	2.40	357,248	3.55	17.50	7.89	....	.....	.....
Casualties	455,657	.47	2.12	1.01	69,286	.69	3.39	1.53	....	.....	.....
Miscellaneous	399,621	.41	1.86	.88	149,095	1.48	7.30	3.29	....	.....	.....
Total transportation	$7,748,843	7.98	36.10	17.14	$1,824,228	18.11	89.35	40.29	....	$1,249,210	$653,182
Maintenance of equipment (excluding depreciation)	4,217,392	4.34	19.65	9.33	577,807	5.73	28.30	12.76	....	.....	.....
Depreciation and retirements	503,068	.52	2.34	1.11	72,275	.72	3.54	1.60	....	.....	.....
Total maintenance of equipment	$4,720,460	4.06	21.99	10.44	650,082	6.45	31.84	14.36	....	.....	.....
Maintenance of way and structures	2,312,922	2.39	10.78	5.12	1,105,833	10.98	54.16	24.43	....	.....	.....
Traffic	157,595	.16	.73	.35	34,354	.34	1.68	.76	....	.....	.....
General	445,952	.46	2.08	.99	101,623	1.01	4.98	2.24	....	.....	.....
Total operating expenses	$15,385,772	15.85	71.68	34.04	$3,716,120	36.89	182.01	82.08	24%	1,700,270	1,012,427
Loaded car miles	77,617,642	.....	.....	.....	7,741,132	.....	.....	.....	....	.....	.....
Empty car miles	38,939,514	.....	.....	.....	4,666,865	.....	.....	.....	....	.....	.....
Estmd. loaded car miles (loaded plus ½ of empty)	.....	97,087,399	.....	.....	.....	.....	.....	.....	10%	.....	.....
Net ton miles	.....	.....	2146440123	.....	.....	.....	204171043	.....	10%	.....	.....
Gross ton miles	.....	.....	.....	4520219358	.....	.....	.....	452731013	10%	.....	.....

Office of Asst. General Auditor, Division of Statistics, August 25th, 1921.

*Terminals include Head of Lakes, Twin Cities and Puget Sound Division

[fol. 229]

N. P. Exhibit No. 39

Special #254

Northern Pacific Railway Company

Statement Showing Relationship of State Taxes to Road Miles and Gross Operating Revenue by States, Year Ended Dec. 31, 1920

	Road miles operated	Percentage	Taxes other than U. S. Govt.	Percentage	Gross operating revenues	Percentage	Amount of taxes per road mile	Rank on road-mile basis	Percentage of taxes to gross optg. revenue
Wisconsin	137.00	2.06	$96,642.93	1.14	$1,019,609.22	.90	$705.42	6	9.48
Minnesota	995.22	14.95	1,474,164.76	17.37	27,205,957.26	24.06	1,481.25	2	5.42
North Dakota	1,523.18	22.89	1,707,310.33	20.11	17,572,443.88	15.54	1,120.89	4	9.72
Montana	1,610.74	24.20	1,420,684.12	16.74	33,394,804.47	29.53	882.01	5	4.25
Idaho	323.57	4.86	467,732.38	5.51	4,131,418.91	3.65	1,445.54	3	11.32
Washington	1,937.14	29.11	3,260,113.09	38.41	29,274,964.55	25.89	1,682.95	1	11.14
Oregon	54.74	.82	27,342.72	.32	327,437.72	.29	499.50	7	8.35
Manitoba	73.70	1.11	15,753.22	.19	157,771.77	.14	213.75	8	9.98
British Columbia			18,207.52	.21					
Miscellaneous			143.40						
System	6,655.29	100.00	$8,488,094.47	100.00	$113,084,407.78	100.00	$1,275.39		7.51

Office of Assistant General Auditor, Division of Statistics, September 17, 1921.

[fol. 230]

N. P. Exhibit No. 40

Northern Pacific Railway Company

Comparison of Intrastate and Interstate Freight Revenue Statistics, Year Ended December 31, 1920

State of Washington:	Intrastate	Per cent of total	Interstate	Per cent of total	Total
Freight revenue (acct. 101)	$8,792,969	43.71	11,322,784	56.29	2,115,753
Revenue net ton miles (thousands)	452,785	27.62	1,186,577	72.38	1,639,362
Revenue per net ton mile	$.01942	....	$.00954	....	.01227
All other states:					
Freight revenue (acct. 101)	$7,916,417	12.98	53,058,220	87.02	60,974,637
Revenue net ton miles (thousands)	493,098	7.94	5,720,388	92.06	6,213,486
Revenue per net ton mile	$.01605	....	.00928	....	.00981
Entire line (including Washington):					
Freight revenue	$16,709,386	20.61	64,381,004	79.39	81,090,390
Revenue net ton miles (thousands)	945,883	12.05	6,906,965	87.95	7,852,848
Revenue per net ton miles	$.01768	....	.00932	....	.01033

Office of Asst. Gen. Audr. Stat. Oct. 25, 1921.

[fol. 231]

N. P. Exhibit No. 41

Special 255

Northern Pacific Railway Company

Comparison of Estimated Car Mile and Gross Ton Mile Cost Log Traffic, State of Washington, Year Ended Dec. 31, 1920

Estimated Car Mile Basis

Exhibit No. 18

Freight revenue	$1,308,875	
Add. switching	4,255	
Demurrage	12,345	
		$1,325,475
Operating Cost log Traffic (Estimated Car Mile Basis)		1,848,210
Deficit from Operation		522,735

Estimated Car Mile Basis—Continued

		Seattle & Tacoma M. L. Puget Sound terminals	Seattle & Tacoma Div. branch lines	Total
Gross Ton Mile Basis:				
Gross Ton Miles train West of Ellensburg (thousands)		1,063,910	492,077	1,555,987
Freight operating Expenses		$8,687,695	$4,197,978	$12,885,673
Estimated charges per thousand gross ton miles		$8.17	$8.53	.....
Gross Ton Miles Log Traffic:				
Loaded Car Miles	3,192,595			
Empty car miles	3,192,595			
Total Car Miles	6,385,190			
Tare Weight based on 14 tons per car		22,231,955	67,160,705	89,392,660
Add Net Ton Miles		25,310,980	76,462,160	101,773,140
Gross Ton Miles (estimated)		47,542,935	143,622,865	191,165,800
Cost of Log Traffic on above basis		$368,426	1,225,103	$1,613,529
Revenue from log traffic (including switching and demurrage)				1,325,475
Net Operating Deficit				$288,054

NOTE.—In explanation of difference in deficit of $288,054, as shown on gross ton mile basis and $539,334, as stated on exhibit #18, based on estimated car miles, it may be stated that assuming that tare weight of 14 tons for log flats is representative, such difference would be due to fact that gross ton mile basis while it indicates actual weight moved does not fully reflect situation as regards log traffic, owing to fact that due to large empty car movement which is considered in expense as equivalent to one half of loaded movement, by using only weight hauled rather than cost of service, latter feature would not receive proper consideration.

It is figured that cost of handling two empties is equivalent to one load, but on a strictly weight basis empty car gross ton miles would only equal 30.43% of loaded car gross ton miles.

Est., considering taxes on return on property investment.
Office of Asst. Gen. Aud., Division of Statistics, Sept. 17, 1921.

[fol. 232]

N. P. Exhibit No. 42

Special #269

Northern Pacific Railway Company

12—371

Statement Showing Cost of Operation on Seattle and Tacoma Divisions Based on Estimated Loaded Car Miles, Six Months Ended June 30th, 1921

Freight Operating Expenses:	Seattle and Tacoma main lines in Wash., incl. Puget Sound divn.	Cost (in cts.) per estmd. loaded car mile	Seattle and Tacoma main lines in Wash., excl. Puget Sound divn.	Cost (in cts.) per estmd. loaded car mile	Seattle and Tacoma brch. lines in Washington	Cost (in cts.) per estmd. loaded car mile
Total station service	$415,028	4.76	$60,906	.70	$71,736	1.80
Total yard service	685,874	7.86	129,992	1.49	115,795	2.90
Train enginemen	110,739	1.27	110,739	1.27	95,016	2.38
Fuel for locomotives (train)	173,793	1.99	173,793	1.99	145,131	3.63
Water for locomotives	1,915	.02	1,915	.02	4,340	.11
Lubricants for locomotives	2,657	.03	2,657	.03	2,164	.06
Other supplies for train locos	2,552	.03	2,552	.03	2,090	.05
Enginehouse expenses—train	42,558	.49	42,558	.49	25,609	.64
Total engine service	$334,214	3.83	334,214	3.83	274,350	6.87
Trainmen	113,517	1.30	113,517	1.30	138,314	3.47
Train supplies and expenses	18,292	.21	18,292	.21	8,921	.22
Total train service	$131,809	1.51	131,809	1.51	147,235	3.69
Total casualties	43,869	.50	29,691	.34	31,730	.79

Statement Showing Cost of Operation—Continued

	Seattle and Tacoma main lines in Wash., incl. Puget Sound divn.	Cost (in cts.) per estmd. loaded car mile	Seattle and Tacoma main lines in Wash., excl. Puget Sound divn.	Cost (in cts.) per estmd. loaded car mile	Seattle and Tacoma brch. lines in Washington	Cost (in cts.) per estmd. loaded car mile
Dispatching trains	29,836	.34	29,836	.34	18,458	.46
Telegraph & telephone operation	5,066	.06	2,873	.03	586	.01
Signal & interlocker operation	6,494	.07	3,978	.05	153	.01
Crossing protection	12,498	.14	2,775	.03	1,452	.04
Drawbridge operation	5,135	.06	1,545	.02	6,156	.15
Other accounts	[25,708]*	[.29]*	[32,423]*	[.37]*	11,442	.29
Total miscellaneous	$33,321	.38	8,584	.10	38,246	.96
Total transportation expenses	$1,644,115	18.84	695,196	7.97	679,092	17.01
Repairs of steam locomotives	181,139	2.08	119,363	1.37	59,734	1.50
Repairs of freight cars	311,011	3.56	311,011	3.56	152,957	3.83
Shop machinery	3,849	.04	1,636	.02	1,296	.03
Superintendence	21,446	.25	11,212	.13	9,777	.25
Injuries to persons	2,371	.03	824	.01	707	.02
Other mtce. of equipt—incl. depren.	125,225	1.44	95,347	1.09	56,520	1.41
Total Maintenance of Equipment	$645,041	7.40	539,392	6.13	281,051	7.04
Total Maintenance of Way & Structs.	629,725	7.22	357,755	4.10	520,069	13.02
Total Traffic	33,505	.38	14,329	.16	12,470	.31
Total General	66,863	.77	26,897	.31	26,652	.67
Total operating expenses—Freight	$3,019,249	34.61	$1,633,569	18.72	$1,519,334	38.05
Estimated loaded car miles (loaded plus ½ of empty)		8,724,180		8,724,180		3,992,740

Log traffic:

Cars of logs handled	34,657			
Loaded car miles	1,019,916			
Empty car miles (assuming that each loaded car would necessitate an empty movement)	1,019,916			
Estimated loaded car miles (loaded plus one-half empties)	—M/L		380,480	
Apply cost per estimated loaded car mile as above against log traffic would give expenses as follows:	1,529,875—B/L		1,149,394	
Main line (incl. Puget Sound Div'n)		$131,684	Excl. Puget Sound Div'n	$71,226
Branch lines		437,344		437,344
Operating cost		$569,028		$508,570
Revenue		492,753		492,753
Deficit from operation		[$76,275]*		[$15,817]*

[*Red in copy.]
Office of Asst. General Auditor, Division of Statistics, October 19th, 1921.

[fol. 233] N. P. Exhibit No. 43

Northern Pacific Railway Company

Revenue from Intrastate Log Traffic, State of Washington, Seven Months Ended July 31, 1921 and 1920

January 1921	$24,064
February	41,678
March	72,382
April	107,612
May	117,072
June	129,945
July	50,434
7 months ended July 31, 1921	$543,187
Seven months ended July 31, 1920	$752,059
Add: 25% to equalize with present rates effective Aug. 26, 1920	188,015
	$940,074

Office of Asst. General Auditor, Division of Statistics, Oct 13, 1921.

[fol. 234] N. P. Exhibit No. 44

Northern Pacific Railway Company

Washington Log Rate Case

The terminal cost (switching and handling) of a ton of freight handled at the freight houses of a large city is probably 40 cents. Thirty cents per ton terminal expense may be assumed as a fair average for the country. Now let us take 30 cents per ton as the terminal expense for a given road and 6 mills (0.6 cent) per ton per mile as the uniform cost of haulage. It will be instructive to compare the entire cost of transporting a ton of freight 10 miles and 1,000 miles.

		Cost of transporting ten miles, cents	Cost of transporting 1,000 miles, cents
I.	Terminal expenses (2 x 30 cents)	.60	.60
II.	Haulage expense (.006 cen per mile)	.06	6.00
III.	Total	.66	6.60
IV.	Total cost per ton mile	.066	.0066

Thus, the 1,000 mile freight service costs $6.60 per ton, or 33 cents per 100 pounds, approximately the fifth class rate from New York to Chicago, 1,000 miles. This $6.60 is only ten times as much as the 66-cent cost of the ten mile haul, tho the distance is 100 times greater. The rate has not increased in direct proportion to the distance. In such a case the rate for 1,000 miles would be $66. The factor of rate increase (10) is the square root of the quotient which results from dividing the longer distance (1,000) by the shorter (10). This may be taken as a rough rule in calculating the cost of transporting the same product different distances.

(Extract from Railway Traffic-Alexander Hamilton Institute.)

Office of Asst. General Auditor, Division of Statistics, October 14th, 1921.

[fol. 235] N. P. Exhibit No. 45

Special 268

Northern Pacific Railway Company

Statement Showing Intrastate Movement of Log Shipments, State of Washington, Six Months Ending June 30, 1921

From—	To—	No. of cars
Aberdeen	Seattle	11
"	White	63
Alcha	Hoquiam	35
American Lake	Tacoma	1
Andron	Everett	141
Arlington	"	79
"	Fremont	19
"	Hartford	2
Barco	Everett	4
"	Fremont	516
"	Tacoma	5
Black Lake	Olympia	2
" "	Tacoma	2
Blue Canyon	Bellingham	336
Bordeaux	Olympia	1,684
Bothell	Tacoma	1
Bristol	Yakima	9
Broomfield	Ballard	20
"	Puyallup	1
Buckley	"	1
"	Tacoma	2,497
Buffelin Spur	"	191
Bunker	Hoquiam	221

From—	To—	No. of cars
Carlisle	Aloha	204
"	Hoquiam	63
"	Stearnsville	154
Case	Bellingham	157
"	Coyne	1
"	Gale	36
"	Larson	58
"	Seattle	1
Casway	Ellensburg	31
"	Yakima	2,205
Centralia	Hoquiam	4
"	Tacoma	1
Ceres	"	1
Chambers Prairie	McCleary	14
" "	Tacoma	2
Chehalis	"	1
"	Tacoma Wharf	2
Clear Lake	Tacoma	5
Clipper	Clear Lake	2
Copalis	Puyallup	11
Cosmopolis	"	7
Covington	Tacoma	1
Coyne	Bellingham	10
Crocker	Tacoma	320
Custer	Nallpec	2
"	Raymond	70
"	So. Bend	627
Darrington	Everett	1,595
Delvan	Bellingham	4
[fol. 235-1] Draydon	"	157
Draydon	Clear Lake	353
"	Gale	1
"	Larson	4
"	Sedro Woolley	3
Dryad	Bunker	104
"	Tacoma	1
Easton	Cle Elum	13
"	Ellensburg	6
"	Yakima	35
Elma	Hoquiam	1
Enumclaw	Fremont	2
"	Puyallup	34
"	Tacoma	18
Everett	Everett	6
"	Fremont	5
Fairfax	Broomfield	35
"	Puyallup	2
"	Tacoma	183
Frances	"	3

From—	To—	No. of cars
Gate	Centralia	1
"	Hoquiam	3
"	Olympia	3
Gibson Creek	Bordeaux	124
" "	Olympia	2,055
Grand Mound	Tacoma	1
Hackett Spur	McCleary	2
" "	Puyallup	2
Hartford	Tacoma	2
Hazel	Everett	941
Hiawatha	Tacoma	1
Hoquiam	Hoquiam	22
International	Tacoma	1
Johnson Creek	So. Tacoma	113
" "	Tacoma	442
Kanaskat	Puyallup	1
Kangley Jct.	Norco	1
" "	Tacoma	150
Kerriston	Barneston	20
"	Norco	1,445
Littell	McCormick	36
Little Rock	Hoquiam	81
" "	Olympia	4
" "	Puyallup	4
Lockloy	Everett	411
McCleary	White	37
Machias	Everett	134
"	Seattle	2
Malone	Hoquiam	651
Maltby	Everett	560
Marcilla	Tacoma	3
Mendota	Centralia	433
"	Chehalis	47
"	Cosmopolis	19
"	Hoquiam	2
Menlo	Olympia	1
"	Tacoma	3
Mentzer Spur	"	107
" "	W. Tenino	2
Mima	McCleary	4
Mirror Lake	Bellingham	97
" "	Gale	16
[fol. 235-2] Mirror Lake	Sedro Woolley	16
Moclips	Olympia	1
Montesano	Aberdeen	1
"	Hoquiam	3
"	White	32
Morgood	Coyne	3
"	Gale	1

From—	To—	No. of cars
Nallpee	Centralia	156
"	Raymond	12
Napavine	Cosmopolis	35
"	W. Tenino	42
Nelson	Cle Elum	8
"	Ellensburg	8
Olympia	McCleary	93
"	Tacoma	2
"	Union Mills	1
Onslow	Kelso	1
Orting	Tacoma	30
Oso	Everett	1,267
Packwood	Union Mills	7
Pe Ell	Raymond	1
"	Tacoma	1
Prairie	"	2
Puyallup	Seattle	1
" River	Puyallup	31
" "	Tacoma	6,929
Rainier	So. Tacoma	10
"	Tacoma	1
"	W. Tenino	22
Raymond	Nallpee	25
Satsop	Olympia	7
Saxon	Larson	296
"	Park	1,349
Sloman	Bellingham	34
So. Prairie	Tacoma	6
Star Spur	Globe	2
" "	Nallpee	117
" "	Seattle	2
" "	Tacoma	242
Tacoma	Puyallup	47
"	Seattle	3
"	So. Tacoma	29
"	Tacoma	3
Tulker	Lowell	1
"	Tacoma	11
Van Zandt	"	2
Weatherwax	Aberdeen	2,299
W. Tenino	Tacoma	132
White	McCleary	8
Whitmarsh	Tacoma	1
Wickersham	Bellingham	377
"	Clear Lake	24
"	Gale	9
"	Park	19
Winlock	Chehalis	41
"	Hoquiam	205

From—	To—	No. of cars
Winlock	McCormick	45
"	So. Aberdeen	182
Woodinville	Everett	1
"	Fremont	2
Wynooche	Puyallup	2
Yacolt	Felida	40
Total		34,657

Office of Auditor Freight Receipts, St. Paul, Minn., Oct. 15th, 1921.
AFR-S-1629.

[fol. 236] N. P. Exhibit No. 46

Northern Pacific Railway Company

Washington Intrastate Tonnage, Logs, Years Ended December 31, 1917, 1918, 1919, and 1920; Also Six Months Ended June 30, 1921

	Tons	Percentage of 1917
Year ended Dec. 31, 1917	2,359,251	100.%
1918	2,794,581	118.%
1919	2,904,602	123.%
1920	3,245,878	138.%
6 months ended June 30, 1921	1,167,009	

Office of Asst. General Auditor, Division of Statistics, October 14th, 1921.

[fol. 237] N. P. Exhibit No. 47

Northern Pacific Railway Company

Proposed Log Rates on Compensatory Basis, State of Washington

The following plan has been used in arriving at proposed scale of compensatory log rates in accordance with attached schedule.

In order to reflect situation properly it is necessary to increase actual revenue received in 1920 so as to bring entire year's revenue to basis effective August 26, 1920.

This results in the following figures

Revenue January to August, 1920.....	$862,340	
Add 25% to equalize with rates effective August 26, 1920 (25% of $862,340)..	215,585	
Add September to December, 1920—actual	446,535	
		$1,524,460
Revenue which present rates would have produced in 1920:		
In addition to above revenues, switching and demurrage to the extent of $16,600 was reported, making total revenue...		$1,541,060
Operating expenses log traffic as reported for year 1920 aggregated	$1,848,210	
Add—to equalize rate of wages account Decision #2 for January to April 1920....	64,283	
Deduct—to reflect decrease in wages Labor Board Decision #147, effective July 1, 1921, for entire year 1920	[134,054]*	
Operating expenses equated.....	$1,778,439	
Add—Taxes	166,619	
		$1,945,058
Net operating deficit		[$403,998]*
[fol. 238] 6% return on investment would give....		$1,037,751
Add—net operating deficit		[403,998]*
Additional income which would be required to produce return		$1,441,749

based on assumption that present reduced wages effective July 1, 1921 had been in effect during 1920, and that revenue for entire year had been on basis as increased August 26, 1920.

The attached schedule of rates is based entirely on distance schedule, no special or train load rates having been considered.

Proportion of additional revenue required to equated 1920 revenue is 93.56%.

Increasing existing rates by above percentage would produce a greater amount of revenue than contemplated.

All rates have, therefore, been correspondingly reduced so that such rates if applied to 1920 movements would produce required return.

[*Red in copy.]

It should, of course, be borne in mind that production of such return is based on year 1920 performance.

According to present indications 1921 will be very much under last year, due to general business conditions, as is evidenced by fact that revenue from intra-state log shipments, State of Washington, for seven months ended July 31, 1921 aggregated $543,187 in comparison with revenue from January to July 1920 of $940,074 as equated to basis of present rates.

[fol. 239] Northern Pacific Railway Company

Statement Showing Taxes as Allocated to Log Traffic. Year Ended December 31, 1920, State of Washington

State of Washington

State taxes as reported to Interstate Commerce Commission		$3,260,113	
This represents accruals as nearly as could be anticipated. Actual 1920 taxes as assessed are $3,274,772. Book figures although somewhat less, have been used in order to conform with annual report.			
Gross operating revenues State of Washington		$29,274,965	
State taxes—State of Washington		3,260,113	
Percentage of taxes to gross operating revenue		11.14	
11.14% of $1,325,475 actual revenue for 1920 would give as assignable to log traffic			$147,658
Proportion of U. S. Government taxes based on log traffic revenue to entire line gross revenue, Federal income and war taxes		$1,465,938	
Capital stock and stamp tax		154,654	
		1,620,592	
Properties chargeable to log traffic—1.17%			$18,961
Gross operating revenue entire line	$113,084,408—	100.00%	
Gross operating revenue log traffic—Washington	1,325,475—	1.17%	
			$166,619

For item exclusive of terminals, taxes have been reduced to $104,-987 based on valuation exclusive of equipment assigned to log traffic—63.01% of valuation including terminals.

[fol. 240]

Special #263

Northern Pacific Railway Company

Statement Showing Valuation Used as a Basis for Figuring Return on Intrastate Log Traffic, State of Washington, Year Ended December 31, 1920

(Including Puget Sound terminals)			(Excluding Puget Sound terminals)	
Valuation of line and structures as per exhibit (Cost of reproduction)	$105,528,279		Valuation — Line—structures	$84,578,995
Deduct Hartford to Monte Cristo account not operated	[2,535,225]*		Deduct Hartford-Monte Cristo (not operated)	[2,535,225]
Valuation of land (actual value only) exclusive of Hartford to Monte Cristo account not operated	27,266,798		Valuation of land (actual) excluding Hartford-Monte Cristo	5,580,267
Total	$130,259,852		Total	$87,624,037
Amount assignable to freight based on freight proportion of operating expenses (74.60%)	$97,173,850		Amount assignable to freight on freight proportion of operating expenses (69.86%)	$61,214,152
Freight car miles loaded and empty Seattle and Tacoma divisions in Washington	39,639,530	100%		
Freight car miles loaded and empty log traffic	6,085,316	15.35%		

Percentage of logging traffic 15.35%, 15.35% of $97,173,850	$14,916,186	Percentage of logging traffic 15.35%, 15.35% of $61,214,152	$9,396,372
Add equipment Log cars and (11.71% of cost of reproduction of locomotives, and cabooses in freight service Seattle and Tacoma divisions) based on relation of gross ton miles log traffic to total gross ton miles	$2,379,662	Proportion of equipment.	$2,379,665
	$17,295,851		$11,776,037
6% of above amount would give annual return of	$1,037,751	6% of above amount would give annual return of	$706,262

Office of Assistant General Auditor, Division of Statistics, October 10, 1921.

[*Red in copy.]

[fol. 241] Special #263-A

Northern Pacific Railway Company

Comparison of Compensatory Return, Log Traffic, State of Washington, Year 1920

	Including Puget Sound terminals	Excluding Puget Sound terminals
6% of valuation as per exhibit—Special #263	$1,037,751	$706,562
Revenues (equated for 1920 to present basis)	1,541,060	1,541,060
Operating expenses as stated	1,848,210	1,626,923
Deduct to equalize effect of Decision #147 effective July 1, 1921	69,771	54,430
Operating expenses	1,778,439	1,572,493
Taxes—as per attached	166,619	104,987
Total operating expenses and taxes	1,945,058	1,677,480
Deficit from operation	403,998	136,420
Additional revenue required to produce compensatory return	1,441,749	842,982
Compensatory return as above—		
Revenue	2,982,809	2,384,042
Expenses & taxes	1,945,058	1,677,480
Net return (6% on valuation)	$1,037,751	$706,562

Office of Asst. General Auditor, Division of Statistics, October 10, 1921.

[fol. 242] N. P. Exhibit No. 48

Northern Pacific Railway Company

Statement showing value of equipment, cars, engines, and cabooses used in transportation of logs on Tacoma and Seattle Divisions, calendar year of 1920, cars used based upon the average number of cars in logging service and locomotives and cabooses based upon the proportion which the gross ton miles of log traffic bears to gross ton miles of all freight traffic, or 11.71 per cent, and applying this percentage to the value of all locomotives and cabooses in freight service as shown in the following table

Seattle Division

Value of Engines by Classes

Class	Original cost	Reproduction cost	Reproduction cost, less depreciation
F-1	$13,449	$26,898	$4,672
F-3	10,760	21,520	3,371
S	12,811	25,622	11,154
E-1	11,008	22,016	3,050
Y-5	18,881	37,762	20,875
Y-2″	18,280	36,560	36,276
S-4	16,788	33,576	17,830
W	18,333	36,666	23,126
W-1	20,552	41,104	31,195
W-3	62,052	62,052	59 832
Z	28,242	56,484	37,896
Z-3	42,000	84,000	76,199

Tacoma Division

Value of Engines by Classes

F-1	13,449	26,898	4,672
F-3	10,760	21,520	3,371
S-2	17,536	35,072	15,418
S-1	13,154	26,308	12,135
S	12,811	25,622	11,154
E-3	10,932	21,864	3,748
D-3	9,596	19,192	3,374
Y-2	18,280	36,560	36,276
S-3	17,410	34,820	17,340
W	18,333	36,666	23,126
W-1	20,552	41,104	31,195

"Y-2 Remodelled

Using the above table as basis the cost of total number of engines in freight service would be as follows:

Seattle Division

Value of Engines in Freight Service

	No. in service	Original cost	Reproduction cost	Reproduction cost, less depreciation
F-1	9	$121,041	$242,082	$42,048
F-3	2	21,520	43,040	6,742
S	2	25,622	51,244	22,308
E-1	1	11,088	22,016	3,050
Y-5	4	75,524	151,048	83,500
Y-2	5	91,400	182,800	181,380
S-4	4	67,152	134,304	71,320
W	11	201,663	403,326	254,386
W-1	10	205,520	411,040	311,950
W-3	6	372,312	372,312	358,992
Z	9	254,178	508,356	341,064
Z-3	8	336,000	672,000	609,592
Total	71	1,783,020	3,191,568	2,296,332

Using percentage of .1171 indicating the amount of engines used strictly log service the result would be:

Original cost	$208,791.64
Reproduction cost	373,732.61
Reprod. cost less Deprec.	268,900.47

[fol. 242-1] Tacoma Division

Value of Engines in Freight Service

	No. in service	Original cost	Reproduction cost	Reproduction cost, less depreciation
F-1	9	$121,041	$242,082	$42,048
F-3	1	10,760	21,520	3,371
S-2	1	17,536	35,072	15,418
S-1	5	65,770	131,540	60,675
S	8	102,488	204,976	89,232
E-3	1	10,932	21,864	3,748
D-3	1	9,596	19,192	3,374
Y-2	4	73,120	146,240	145,104
S-3	4	69,640	139,280	69,360
W	7	128,331	256,662	161,882
W-1	4	82,208	164,416	124,780
Total	45	691,442	1,382,844	718,992

Using percentage of .1171 indicating the value of engines used in strictly log service the result would be:

Original cost	$80,965.51
Reproduction cost	161,931.03
Reprod. cost less Deprec.	84,193.96

Summary

Value of Engines in Log Service

	Original cost	Reproduction cost	Reproduction cost, less depreciation
Seattle Div.	$208,791.64	$373,732.61	$268,900.47
Tacoma Div.	80,965.51	161,931.03	84,193.96
Total	$289,757.15	$535,663.64	$353,094.43

Cars

	Original cost	Reproduction cost	Reproduction cost, less depreciation
Log Flats	$600 Ea.	$1,200 Ea.	$895 Ea.
Cabooses	825 "	2,584 "	1,368 "

On above basis, following is cost of Log Flats in Log Service:

	Aver. No. cars in svs.	Original cost	Reproduction cost	Reproduction cost, less depreciation
Seattle Div.	590	$354,000	$708,000	$528,050
Tacoma Div.	927	556,200	1,112,400	829,665
Total	1,517	910,200	1,820,400	1,358,715

Cabooses

	Total No. cabooses in frt. service	Original cost	Reprod. cost	Reproduction cost, less depreciation
Seattle Div.	50	$41,250	$129,200	$68,400
Tacoma Div.	28	23,100	72,352	38,304
Total	78	64,350	201,552	106,704

[fols. 242-2 & 243] Using percentage of .1171 indicating number of cabooses used strictly in log service, result would be:

	Original cost	Reproduction cost	Reproduction cost, less depreciation
Seattle Div.	$4,830.37	$15,129.32	$8,009.64
Tacoma Div.	2,705.01	8,472.42	4,485.39
Total	$7,535.38	$23,601.74	$12,495.03

Grand Summary

	Original cost	Reproduction cost	Reproduction cost, less depreciation
Engines	$289,757.15	$535,663.64	$353,094.43
Log Flats	910,260.00	1,820,400.00	1,358,715.00
Cabooses	7,535.38	23,601.74	12,495.03
Total ..	1,207,552.53	2,379,665.38	1,724,304.46

200A. Comparative General Balance Sheet—Asset Side

For instructions covering this schedule, see the text pertaining to General Balance Sheet Accounts in the Uniform System of Accounts for Steam Railway Corporations. The entries in this balance sheet should be consistent with those in the supporting schedules on the pages indicated. The entries in the short column (b_2) should be deducted from those in column (b_1) in order to obtain corresponding entries for column (c). All credit entries hereunder should be in red ink. The making of entries in column (d) is optional.

Line No.	Balance at beginning of year (a)	Item (b)	(b_1) Total book assets at close of year	(b_2) Respondent's own issues included in (b_1)	Schedule No.	Balance at close of year (c)	Net change during year (Increase in black, decrease in red) (d)
1		**Investments**					
2	$499,822,010.31	(701) Investment in road and equipment (p. 203)	.....	.....	211	$525,918,631.23	$26,096,620.92
3	.....	(702) Improvements on leased railway property (p. 203)	.....	.....	211	.....	.....
4	8,459,681.41	(703) Sinking funds (p. 210)	3,019.94	None	214	3,019.94	D 8,456,661.47
5	2,253,294.22	(704) Deposits in lieu of mortgaged property sold (p. 211)	594,150.83	None	215	594,150.83	D 1,659,143.39
6	459,365.63	(705) Miscellaneous physical property, (p. 207)			212	7,485,182.20	7,025,816.57
7	.....	(706) Investments in affiliated companies:					
8	142,622,202.60	(A) Stocks			...	144,045,402.60	1,423,200.00
9	32,257,634.33	(B) Bonds			...	37,065,697.75	4,808,063.42
10	3,066,111.85	(C) Notes			...	2,556,599.35	D 509,512.50
11	2,934,054.63	(D) Advances (p. 218)			220	2,976,081.13	42,026.50
12	.....	(707) Other investments:			...	.....	.....
13	1.00	(A) Stocks			...	1.00	.....
14	7,748,866.65	(B) Bonds			...	9,773,668.30	2,024,801.65
15	15,316,239.46	(C) Notes			...	16,876,498.75	1,560,259.29
16	.....	(D) Advances (p. 218)			220	.....	.....
17	.....	(E) Miscellaneous			...	.....	.....
18	714,939,462.09	Total investments			...	747,294,933.08	32,355,470.99
19		**Current Assets**					
20	476,476.63	(708) Cash			...	9,778,593.45	9,302,116.82
21	.....	(709) Demand loans and deposits			...	.....	.....
22	.....	(710) Time drafts and deposits	.....	.....	...	.....	.....
			(b_1) Total book assets at close of year	(b_2) Respondent's own issues included in (b_1)			
23	2,020,183.00	(711) Special deposits (p. 211)	6,155,299.69	None	216	6,155,299.69	4,135,116.69
24	5,679.03	(712) Loans and bills receivable (p. 218)			223	57,079.03	51,400.00
25	9,150.78	(713) Traffic and car-service balances receivable			...	2,333,853.25	2,324,702.47
26	.....	(714) Net balance receivable from agents and conductors			...	1,022,744.94	1,022,744.94
27	30,544,902.17	(715) Miscellaneous accounts receivable			...	26,559,485.25	D 3,985,416.92
28	4,936.97	(716) Material and supplies			...	14,372,325.02	14,367,388.05
29	255,449.62	(717) Interest and dividends receivable			...	449,562.55	194,112.93
30	.....	(718) Rents receivable			...	29,509.42	29,509.42
31	.....	(719) Other current assets			...	133,854.56	133,854.56
32	33,316,778.20	Total current assets			...	60,892,307.16	27,575,528.96
33		**Deferred Assets**					
34	8,210.00	(720) Working fund advances	.....	.....	...	66,350.09	58,140.09
35	.....	(721) Insurance and other funds (p. 219)	.....	.....	236	.....	.....
36	21,441,194.95	(722) Other deferred assets			...	22,396,563.09	955,368.14
37	21,449,404.95	Total deferred assets			...	22,462,913.18	1,013,508.23
38		**Unadjusted Debits**					
39	42,900.00	(723) Rents and insurance premiums paid in advance			...	41,238.99	D 1,661.01
40	.....	(724) Discount on capital stock			...	.....	D.....
41	.....	(725) Discount on funded debt			...	.....	.....
42	.....	(726) Property abandoned chargeable to operating expenses			...	.....	.....
43	265,665.37	(727) Other unadjusted debits (p. 218)	.....		228	12,937,978.77	12,672,313.40
				Par value of holdings at close of year			
44	.....	(728) Securities issued or assumed—unpledged		9,149,500.00	...	.....	.....
45	.....	(729) Securities issued or assumed—Pledged		None	...	.....	.....
46	308,565.37	Total unadjusted debits			...	12,979,217.76	12,670,652.39
47	770,014,210.61	Grand total			...	843,629,371.18	73,615,160.57

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300P. Profit and Loss Account

Show hereunder the items of the Profit and Loss Account of the respondent for the year, classified in accordance with the Uniform System of Accounts for Steam Railway Corporations. The sum of the dividends stated in this account and those stated in the Income Account (p. 301) for any particular class of stock should equal the total amount of dividends declared on such class during the year as shown in schedule No. 300D, columns (e) and (f).

Line No.	Item (a)	Debits (b)	Credits (c)	Remarks (d)
1	*Credit balance at beginning of year (p. 201)	.....	$121,162,533.89	
2	Credit balance transferred from Income (p. 301)	.....	1,734,183.31	
3	(603) Profit on road and equipment sold (p. 323)	.....	694.58	
4	(604) Delayed income credits (p. 323)	.....	20,492,331.44	
5	(605) Unrefundable overcharges	.....	5,699.80	
6	(606) Donations (p. 323)	.....	112,475.79	
7	(607) Miscellaneous credits (p. 323)	.....	32,611,903.49	
8	Debit balance transferred from Income (p. 301)	.....	.....	
9	(613) Surplus applied to sinking and other reserve funds (p. 322)	$15,420,719.56	.....	
10	(614) Dividend appropriations of surplus (p. 302)	.....	.....	
11	(615) Surplus appropriated for investment in physical property (p. 322)	112,475.79	.....	
12	(616) Stock discount extinguished through surplus	.....	.....	
13	(617) Debt discount extinguished through surplus	.....	.....	
14	(618) Miscellaneous appropriations of surplus (p. 322)	.....	.....	
15	(619) Loss on retired road and equipment (p. 323)	560,284.29	.....	
16	(620) Delayed income debits (p. 323)	.....	.....	
17	(621) Miscellaneous debits (p. 323)	1,771,546.49	.....	
18	*Credit balance carried to Balance Sheet	158,254,796.17	.....	
19	Total	176,119,822.30	176,119,822.30	

300D. Dividends Declared During the Year

Give particulars of each dividend declared during the year and charged to Income or to Profit and Loss. If any such dividend was payable in anything other than cash, explain the matter fully in a footnote. If an obligation of any character has been incurred for the purpose of procuring funds for the payment of any dividend or for the purpose of replenishing the treasury of the respondent after payment of any dividend, give full particulars in a footnote; if none has been incurred for such purpose, state that fact.

Line No.	Name of security on which dividend was declared (a)	Rate per cent Regular (b)	Rate per cent Extra (c)	Par value of amount on which dividend was declared (d)	Distribution of charge: Income (e)	Distribution of charge: Profit and loss (f)	Date: Declared (g)	Date: Payable (h)
41	Common stock	1¾	....	$248,000,000.00	$4,340,000.00	.....	Feb. 26, 1920	May 1, 1920
42	.....	1¾	....	248,000,000.00	4,340,000.00	.....	June 17, 1920	Aug. 2, 1920
43	.....	1¾	....	248,000,000.00	4,340,000.00	.....	Sept. 23, 1920	Nov. 1, 1920
44	.....	1¾	....	248,000,000.00	4,340,000.00	.....	Dec. 16, 1920	Feb. 1, 1921
45	.....	...	....	.....	.....	.....	.....	.....
46	.....	...	....	.....	.....	.....	.....	.....
47	.....	...	....	.....	.....	.....	.....	.....
48	.....	...	....	.....	.....	.....	.....	.....
49	.....	...	....	.....	.....	.....	.....	.....
50	.....	...	....	.....	.....	.....	.....	.....
51	.....	...	....	.....	.....	.....	.....	.....
52	.....				.....	.....	.....	.....
53	Total				17,360,000.00	none	.....	.....

Paid in cash, no obligation incurred for procuring funds for payment.

*Insert "Debit" or "Credit," as may be appropriate.

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[fol. 290]

C., M. & St. P. Exhibit #2

All Freight Operating Statistics, State of Washington

Year 1919	Balance of State	National Park branch of Coast Division	Willapa Harbor branch of Coast Division	Olympic Division	Bellingham Division	Total
Total Operating Expenses	$8,703,272.68	604,527.93	184,516.54	191,366.70	291,680.27	$9,975,364.12
Total Freight Revenue	.....	.....	.....	.....	.....	7,991,769.70
Net Ton Miles	870,721,341	29,806,001	10,523,625	13,277,633	15,597,843	939,926,443
Loaded Car Miles	30,555,883	887,507	367,142	437,364	410,451	32,658,347
Cost per net ton mile	.....	.....	.....	.....	.....	.0105
Cost per loaded car mile	.....	.....	.....	.....	.....	.305
Revenue per net ton mile	.....	.....	.....	.....	.....	.0085
Revenue per loaded car mile	.....	.....	.....	.....	.....	.2445

Year 1920	Operating expense	Net ton mile	Gross ton mile	Loaded car mile	Total car mile	Freight train mile
Coast Division	$6,825,797.68	452,016,820	927,255,933	15,841,307	24,965,954	777,430
Average Costs	.....	.015098	.00736	.43085	.27340	8.7798
Olympic Division	237,162.94	16,396,338	35,831,504	553,588	1,050,517	65,513
Average Costs	.....	.0144638	.006617	.4284	.22575	3.6197
Bellingham Division	403,382.66	18,224,445	32,079,765	482,803	864,426	59,216
Average Costs	.....	.022127	.012574	.83533	.466608	6.812
Total	7,466,343.28	486,637,603	995,167,202	16,877,698	26,880,897	902,159
Average Costs	.....	.015345	.0075026	.44238	.27767	8.276

System Freight Statistics

Year 1919	Net ton mile	Gross ton mile	Train mile	Loaded car mile	Total car mile
Operating Cost, $98,725,348.38	12,862,241,647	27,649,022,631	19,267,902	523,614,156	741,570,261
Average Costs	.007676	.0035708	5.1239	.18855	.13313
Revenue $106,288,453.00—Average Revenue	.0082636	.0038441	5.5163	.20299	.14333

Year 1920	Net ton mile	Gross ton mile	Train mile	Loaded car mile	Total car mile
Operating Cost, $117,694,284.47	12,963,657,567	27,579,301,638	19,562,605	508,970,999	738,468,500
Average Costs	.0090809	.0042675	6.015	.2312357	.159376
Revenue $117,183,815.00—Average Revenue	.0090392	.004249	5.99	.230235	.1586846

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C., M. & St. P. Ry. Co. Exhibit No. 4

Chicago, Milwaukee & St. Paul Railway Company

Statement of All Freight Traffic Operating Expenses, Year 1919, State of Wash.

Requested by Public Service Commission of Washington February 14, 1921

	Accounts	National Park Branch of Coast Division	Willapa Harbor Branch of Coast Division	Olympic Division	Bellingham Division	Balance of State	Total
4-A.	Maintenance of Way and Structures	134,227.98	39,125.69	37,742.02	99,852.54	1,870,072.14	2,181,020.37
	Maintenance of Equipment	212,452.69	43,994.79	57,874.60	58,065.13	1,778,256.34	2,150,643.55
	Traffic	2,276.09	1,169.69	1,278.73	898.10	38,299.65	43,922.26
	Transportation	245,377.87	94,946.42	89,386.32	121,214.43	4,846,924.95	5,397,849.99
	Miscellaneous Operation	11.85	.....	.....	.....	73.25	85.10
	General	12,162.03	6,499.11	6,451.55	12,836.70	210,635.64	248,585.03
	Transportation for Investment—Cr.	[1,980.58]*	[1,219.16]*	[1,366.52]*	[1,186.63]*	[40,989.29]*	[46,742.18]*
	Total Freight Operating Expense	604,527.93	184,516.54	191,366.70	291,680.27	8,703,272.68	9,975,364.12
4-B.	Train Enginemen	37,822.32	12,589.21	12,115.68	10,514.02	408,549.18	481,590.21
	Fuel for Train Locomotives	71,741.26	33,520.28	34,927.52	28,401.32	1,445,930.76	1,614,521.14
	Water for Train Locomotives	1,129.20	308.13	37.30	766.85	29,632.52	31,874.00
	Lubricants for Train Locomotives	527.58	159.94	380.45	521.53	8,683.36	10,272.86
	Other supplies for Train Locomotives	283.48	193.19	643.13	962.09	14,678.74	16,760.63
	Total Frt. Engine Operation	111,503.84	46,770.75	48,104.08	41,165.81	1,907,474.56	2,155,018.84
4-C.	Trainmen	61,859.02	17,815.87	16,270.75	17,423.58	531,957.26	645,326.48
	Train Supplies and Exp.	6,077.93	3,732.13	3,667.54	3,837.16	145,339.23	162,653.99
	Total Freight Train Service	67,936.95	21,548.00	19,938.29	21,260.74	677,296.49	807,980.47
4-D.	Dispatching Trains	3,489.67	1,062.76	1,414.36	1,818.88	49,547.23	57,332.90
	Telegraph & Telephone Operation	458.79	27.86	165.20	33.16	21,599.58	22,284.59
	Signal & Interlocker Operation	18.68	1,751.46	6.37	5.83	6,218.24	8,000.58
	Crossing Protection	633.86	39.60	.91	.59	6,168.43	6,843.39
	Drawbridge Operation	.....	.....	.....	.....	5,784.79	5,784.79
	Total Superintendence	4,601.00	2,881.68	1,586.84	1,858.46	89,318.27	100,246.25
4-E.	Steam Locomotive Repairs	27,974.59	17,052.49	12,018.78	15,923.82	519,364.53	592,334.21
	Freight Train Cars—Repairs	137,140.07	21,739.42	42,481.23	33,498.39	953,062.37	1,187,921.48
	Shop Machinery	72.98	77.07	44.91	820.02	20,919.88	21,934.86
	Superintendence	2,853.43	1,816.63	2,552.71	3,386.42	67,361.37	77,970.56
	Injuries to Persons	63.96	131.21	18.06	107.30	11,053.49	11,374.02
	Total Maintenance of Equipment	168,105.03	40,816.82	57,115.69	53,735.95	1,571,761.64	1,891,535.13
	Freight Train Miles	88,205.	49,043.	48,717.	53,341.	1,309,910.	1,549,216.
	Freight Engine Miles	91,611.	49,881.	49,509.	53,847.	1,468,999.	1,713,847.
	Gross Ton Miles	61,858,609.	22,416,946.	28,481,863.	28,643,637.	1,719,138,627.	1,860,539,682.
	Net Ton Miles	29,806,001.	10,523,625.	13,277,633.	15,597,843.	870,721,341.	939,926,443.
	Loaded Car Miles	887,507.	367,142.	437,364.	410,451.	30,555,883.	32,658,347.
	Empty Car Miles	655,540.	265,022.	374,866.	345,058.	11,311,684.	12,952,134.
314.	Freight Train Car—Repairs	137,140.07	21,739.42	42,481.23	33,498.39	953,062.37	1,187,921.48
	Cost of Repairs to Logging Cars	101,753.71	15,273.00	23,136.67	23,251.06	42,925.14	206,339.58
	Cost of Repairs to other Frt. Cars	35,386.36	6,466.42	19,344.56	10,247.33	910,137.23	981,581.90
	All Frt. Loaded Car Miles	.....	.....	.....	.....	.....	2,304,545.
	Logging Loaded Car Miles	.....	.....	.....	.....	.....	32,657,701.
	Balance of Frt. Loaded Car Miles	.....	.....	.....	.....	.....	30,353,156.
	Cost per Loaded Car Mile. All Frt.	.....	.....	.....	.....	.....	.03637
	Cost per Loaded Car Mile. Logging	.....	.....	.....	.....	.....	.0895
	Cost per Loaded Car Mile. Other Frt.	.....	.....	.....	.....	.....	.03233

*Red in copy.]

C., M. & St. Paul Exhibit No. 5

Chicago, Milwaukee & St. Paul Railway Company

Logging Revenues & Expenses and Car & Ton Mile Statistics, State of

	Balance of State			Olympic Division			National Park branch of Coast Division		
	Amount	Per loaded car mile	Per net ton mile	Amount	Per loaded car mile	Per net ton mile	Amount	Per loaded car mile	Per net ton mile
Train Service:									
*314. Freight Train Cars—Repairs	42,925.14	.0360	.00134	23,136.67	.0989	.00344	101,753.71	.1937	.00755
#401. Trainmen	20,746.33	.0174	.00065	8,701.60	.0372	.00129	36,614.35	.0698	.00272
#402. Train Supplies and Expenses	5,668.23	.0048	.00017	1,961.40	.0084	.00029	3,597.53	.0068	.00026
Total Train Service	69,339.70	.0682	.00216	33,799.67	.1445	.00502	141,965.59	.2703	.01054
Engine Service:									
*308. Steam Locomotives—Repairs	20,255.22	.0170	.00063	6,427.64	.0275	.00096	16,558.16	.0315	.00123
*311. Other Locomotives—Repairs	128.65	.0001	.00001	.....	.....	.....	.....	.....	.....
#392. Train Enginemen	15,933.42	.0134	.00050	6,479.47	.0277	.00096	22,387.03	.0426	.00166
#393. Train Motormen	299.90	.0002	.00001	.....	.....	.....	.....	.....	.....
#394. Fuel for Train Locomotives	56,391.30	.0473	.00175	18,679.24	.0798	.00278	42,463.65	.0809	.00316
#395. Train Power Produced	127.65	.0001	.00001	.....	.....	.....	.....	.....	.....
#396. Train Power Purchased	750.24	.0006	.00002	.....	.....	.....	.....	.....	.....
#397. Water for Train Locomotives	1,155.67	.0010	.00003	19.95	.0001	.00000	668.38	.0013	.00005
#398. Lubricants for Train Locomotives	338.65	.0003	.00001	203.46	.0009	.00003	312.27	.0006	.00002
#399. Other Supplies for Locomotives	572.47	.0005	.00002	343.95	.0015	.00005	167.79	.0003	.00001
#400. Enginehouse Expenses—Train	4,590.66	.0038	.00014	945.76	.0040	.00014	7,334.69	.0140	.00054
Total Engine Service	100,543.83	.0843	.000313	33,099.47	.1415	.00492	89,891.97	.1712	.00667
Total Train and Engine Service	169,833.53	.1425	.20529	66,899.14	.2860	.00994	231,857.56	.4415	.01721
Maintenance of Way & Structures	72,932.82	.0612	.00227	20,184.43	.0863	.00300	79,449.54	.1513	.00590
*Balance of Maint. of Equipment	11,798.70	.0099	.00037	1,804.74	.0077	.00027	28,019.38	.0533	.00208
Traffic	1,493.69	.0013	.00005	683.86	.0029	.00010	1,347.21	.0026	.00010
#Balance of Transportation	82,455.55	.0691	.00256	10,468.99	.0448	.00156	31,693.44	.0603	.00235
Miscellaneous Operations	2.86	.000002	.0000001	.....	.....	.....	7.01	.00001	.000001
General	8,214.78	.0068	.00026	3,450.29	.0147	.00051	7,198.71	.0137	.00053
Transportation for Investment—Cr.	[1,598.58]*	[.0013]*	[.00005]*	[730.81]*	[.0031]*	[.00011]*	[1,172.31]*	[.0022]*	[.00009]*
Total Operating Expenses	345,183.35	.2895	.01075	102,760.64	.4393	.01528	378,400.54	.7205	.02809
Taxes	15,828.16	.0132	.00049	5,126.57	.0219	.00076	20,103.85	.0383	.00149
Interest on Investment—Equipment	72,464.40	.0608	.00226	17,147.04	.0733	.00255	39,692.00	.0756	.00295
Interest on Investment—Road	51,812.77	.0435	.00161	23,278.03	.0995	.00347	63,949.10	.1217	.00475
Total Expense	485,288.67	.406984	.015104	148,312.28	.63397	.02206	502,145.49	.95608	.037275
Total Revenue	415,093.63	.34812	.01292	101,285.80	.43295	.015065	168,459.20	.3206	.0125
Net Ton Miles	32,124,765	.....	.....	6,722,256	.....	.....	13,471,512	.....	.....
Loaded Car Miles	1,192,365	.....	.....	233,940	.....	.....	525,316	.....	.....

[*Red in copy.]

ST. PAUL EXHIBIT No. 5

kee & St. Paul Railway Company

r & Ton Mile Statistics, State of Washington, Year 1919

	l Park branch of Coast Division		Bellingham Division			Willapa Harbor branch of Coast Division			Total		
	Per loaded car mile	Per net ton mile	Amount	Per loaded car mile	Per net ton mile	Amount	Per loaded car mile	Per net ton mile	Amount	Per loaded car mile	Per net ton mile
71	.1937	.00755	23,251.06	.0894	.00345	15,273.00	.1645	.00660	206,389.58	.08955	.003363
35	.0698	.00272	11,039.58	.0425	.00164	4,505.63	.0485	.00195	81,607.49	.03542	.001330
53	.0068	.00026	2,431.22	.0093	.00036	943.86	.0102	.00041	14,602.24	.00634	.000238
59	.2703	.01054	36,721.86	.1412	.00545	20,722.49	.2232	.00896	302,549.31	.13131	.004931
16	.0315	.00123	10,089.33	.0388	.00150	4,312.57	.0464	.00186	57,642.92	.02502	.000940
..	.....	.....	.....	.....	.....	.....	.....	.....	128.65	.00006	.000002
03	.0426	.00166	6,661.68	.0256	.00099	3,183.81	.0343	.00138	54,645.41	.02372	.000891
..	.....	.....	.....	.....	.....	.....	.....	.....	299.90	.00013	.000005
65	.0809	.00316	17,995.08	.0692	.00267	8,477.28	.0914	.00367	144,006.55	.06250	.002347
..	.....	.....	.....	.....	.....	.....	.....	.....	127.65	.00006	.000002
..	.....	.....	.....	.....	.....	.....	.....	.....	750.24	.00033	.000012
..	.....	.....	.....	.....	.....	77.93	.0008	.00003	2,407.81	.00104	.000039
38	.0013	.00005	485.88	.0019	.00007	40.45	.0004	.00002	1,225.27	.00053	.000020
27	.0006	.00002	330.44	.0013	.00005	48.86	.0005	.00002	1,742.65	.00076	.000028
79	.0003	.00001	609.58	.0023	.00009	869.06	.0094	.00038	16,561.20	.00718	.000270
69	.0140	.00054	2,821.03	.0108	.00042	17,009.96	.1832	.00736	279,538.25	.12133	.004556
97	.1712	.00667	38,993.02	.1499	.00579	37,732.45	.4064	.01632	582,087.56	.25264	.009487
56	.4415	.01721	75,714.88	.2911	.01124						
54	.1513	.00590	63,266.57	.2434	.00938	9,894.91	.1065	.00427	245,728.27	.10664	.004005
38	.0533	.00208	5,476.16	.0211	.00081	1,315.82	.0142	.00057	48,414.80	.02101	.000789
21	.0026	.00010	569.04	.0022	.00008	295.81	.0032	.00013	4,389.61	.00191	.000072
44	.0603	.00235	34,426.96	.1325	.00511	5,865.07	.0632	.00254	164,910.01	.07157	.002688
01	.00001	.000001	.....	.....	.....	.....	.....	.....	9.87	.000004	.0000002
71	.0137	.00053	8,133.33	.0313	.00121	1,643.63	.0177	.00071	28,640.74	.01243	.000467
31]*	[.0022]*	[.00009]*	[751.85]*	[.0030]*	[.00011]*	[308.33]*	[.0033]*	[.00013]*	[4,561.88]*	[.00198]*	[.000075]*
54	.7205	.02809	186,835.09	.7186	.02772	56,439.36	.6079	.02441	1,069,618.98	.46412	.017426
85	.0383	.00149	19,229.28	.0740	.00285	3,218.48	.0347	.00138	63,506.34	.02756	.001034
00	.0756	.00295	22,201.92	.0854	.00329	13,870.44	.1494	.00600	165,375.80	.07175	.002694
10	.1217	.00475	67,480.24	.2595	.01001	21,828.47	.2351	.00942	228,348.61	.09907	.003720
49	.95608	.037275	295,746.53	1.1371	.043853	95,356.75	1.027	.041209	1,526,849.72	.66242	.024875
20	.3206	.0125	86,685.77	.333272	.012852	70,236.05	.75648	.03035	841,760.45	.36526	.013715
12	.....	.....	6,743,197	.....	.....	2,313,627	.....	.....	61,375,357		
16	.....	.....	260,079	.....	.....	92,845	.....	.....	2,304,545		

[fol. 244]

N. P. EXHIBIT No. 50

	Gross receipts	Expense	Tax	Net income	Valuation by State board	% earnings
1906	18,013,230	8,684,256	635,700	8,693,274		
1907	19,674,333	11,694,000	944,800	7,035,200		
1908	21,331,859	11,564,772	1,131,000	8,636,085		
1909	22,186,084	12,861,198	1,219,706	8,105,180	110,491,815	7.33
1910	20,823,578	14,310,451	1,300,000	5,213,127	111,581,507	4.67
1911	18,414,005	12,409,456	1,500,000	4,504,54	125,463,697	3.59
1912	18,210,913	12,854,291	1,590,000	3,766,622	126,165,337	2.99
1913	19,257,474	14,284,888	1,978,000	2,994,586	126,165,337	2.37
1914	17,304,341	11,690,592	2,000,000	3,613,748	126,463,475	2.86
1915	16,407,746	10,633,529	1,700,000	4,074,217	126,554,615	3.22
1916	18,579,208	12,206,729	1,825,000	4,537,479	126,554,615	3.59
1917	21,769,882	14,684,708	1,907,264	5,177,909	126,728,055	4.08
1918	25,858,398	21,212,964	2,185,847	2,459,585	126,455,700	1.94
1919	25,485,924	21,798,431	2,600,143	1,087,349	126,455,700	.86
1920	29,274,964	28,629,138	3,260,113	[2,614,287]*	126,455,700	[2.06]*

NOTE.—Gross receipts, expenses and tax taken from reports filed by Company with State Public Service Commission. Valuation is by State Board of Equalization.

[*Red in copy.]

(Here follow pasters marked side folio pages 245-295.)

[fols. 296–300] C., M. & St. P. Exhibit No. 7

Recapitulation of Logging Operations in State of Washington for Year 1919

	Approximate revenue	Net ton miles	Loaded car miles
Balance of Washington	415,093.63	32,124,765	1,192,35
National Park Branch of Coast Division	168,459.20	13,471,512	525,31
Willapa Harbor Branch of Coast Division	70,236.05	2,313,627	92,84
Olympic Division	101,285.80	6,722,256	233,94
Bellingham Division	86,685.77	6,743,197	260,07
Total, State of Wash. Year 1919	841,760.45	61,375,357	2,304,54

[fol. 301] C., M. & St. P. Exhibit No. 8

Cowlitz, Chehalio & Cascade Railway

Chart of Damage to Logging Equipment (Skeleton Patent Bunks During Period of Thirteen Months' Operation, July 1st, 1920, t February 1st, 1921

Handled 4,027 cars.	
Actual damage to cars this period	$9,010.1
Billed against logging companies	991.1
Actual expense to C. C. & C. Ry	8,024.4
Total loaded mileage this period	72,486 mile
Actual expense of damage per car mile	.124
Actual damage bourne by railroad per loaded car mile	.110
Actual per cent total earnings this period from exclusively logging tariff revenue	76.07

[fol. 302] C., M. & St. P. Exhibit No. 9

Statement Showing Actual Weights of Log Shipments, State of Washington

Cars Weighed at Tacoma

Car No.		Date	Feet	Actual ne weight
T. E.	2730	Sept. 26th	4740	36900
"	2482	" 29th	5190	47700
"	561	" 29th	4060	32500

Cars Weighed at Everett

Car No.		Date	Feet	Actual net weight
C., M. & St. P.	45773	Sept. 24th.....	9320	68500
T. E.	847	" "	10200	76040
"	522	" "	8480	68340
"	673	" "	9340	73140
"	851	" "	8590	62940
"	2713	" "	9110	68960
"	2684	" "	8670	62920
"	2781	" "	8430	61580
St. P.	45757	" "	6600	66700
T. E.	546	Sept. 22nd.....	6850	59140
"	2201	" "	7500	62040
"	2176	" "	7710	57900
"	543	" "	6930	48960
"	2835	" "	7990	65060
"	2754	Sept. 21st.....	6240	44020

Cars Weighed at Cedar Falls

T. E.	2245	Sept. 20th.....	4660	48480
"	2138	" "	6060	60760
"	2720	" "	5400	59980
"	45793	" "	5615	56980
"	2207	" "	9060	69080
"	2827	" "	9170	68940
"	2738	" "	7555	57800
"	2723	" "	8770	65320
"	2101	" "	6345	62940
St. P.	45703	" "	9530	70260
"	45981	Sept. 22nd.....	5405	57040
"	45905	" "	4365	54320
"	45799	" "	4560	57320
T. E.	2378	" "	9075	65840
"	2243	" "	9150	68580
"	2303	" "	8995	75820
"	2123	" "	10275	79400
St. P.	45803	" "	5565	53200
"	2256	Sept. 23rd.....	6775	68580
"	2746	" "	5720	55780
"	2059	" "	6930	64360
"	2095	" "	9605	77060
"	2720	" "	8500	68700
"	587	" "	7505	58300
"	2819	" "	10750	77460
"	2354	" "	8455	62820
"	2822	" "	8465	68240
"	2644	" "	7605	68700
"	2245	" "	8240	63820

Car No.		Date	Feet	Actual net weight
St. P.	2223	" "	8140	63720
"	2123	Sept. 24th.....	8380	69200
"	2818	" "	9910	70580
"	2532	" "	8295	64160
"	2303	" "	5600	61880
"	2068	" "	7855	67180
[fol. 302–1]				
St. P.	45739	Sept. 24th.....	7555	62160
"	45803	" "	9415	67680
T. E.	2078	" "	7675	67760
"	837	" "	10255	78720
"	2693	" "	9250	66800
"	45908	" "	7775	62140
"	2293	" "	4730	51240
"	2621	" "	5330	56740
"	2484	" "	5890	65200
St. P.	45793	" "	9375	71360
T. E.	2818	" "	8220	63620
"	2063	" "	8220	63300
"	2059	Sept. 25th.....	2059	68960
"	2746	" "	8745	67940
"	45981	" "	9340	76480
"	667	" "	6685	48160
"	2208	" "	9035	67960
"	866	" "	8830	71000
"	2723	" "	5550	53600
"	2245	" "	4550	53800
"	2664	" "	4090	55980
"	2354	" "	6575	54080
"	544	" "	6670	57620
"	2819	" "	8390	65320
"	587	" "	7400	58040
"	2720	" "	8685	71340
"	2670	" "	5450	65040
"	2150	" "	4930	55960
"	2379	" "	6090	54860
"	763	Sept. 27th.....	6830	59440
"	2708	" "	8165	68000
"	2617	" "	6645	55320
"	2532	" "	11810	89600
"	2303	" "	9705	77440
"	2822	" "	10405	70440
"	2310	" "	9565	68120
St. P.	45857	" "	9175	66860
T. E.	2327	" "	7720	60620
"	2095	" "	9515	67460
"	2132	" "	10590	81560

Car No.		Date		Feet	Actual net weight
T. E.	45739	"	"	8855	70160
"	45803	"	"	10870	75400
"	2078	"	"	10090	76320
"	2123	"	"	4570	53960
"	2631	"	"	7555	62840
"	2243	"	"	8145	69840
St. P.	45905	"	"	7760	67040
T. E.	837	"	"	9615	78040
"	2683	"	"	8360	65680

Cars Weighed at Glacier

C., M. & St. P.	45927	Sept.	29th.....	10060	74960
B. N.	647	"	"	7790	66200
T. E.	2503	"	"	8370	66660
"	2692	"	"	8480	63600
"	2753	"	"	7950	67480
"	2809	"	"	7990	66360

Cars Weighed at Maple Falls

T. E.	2926	Sept.	29th.....	5990	46400
C., M. & St. P.	45945	"	"	8780	65500
T. E.	873	"	"	8080	64620
"	2291	"	"	8010	73800
"	2086	"	"	7630	65360

[fol. 302–2]

T. E.	2120	Sept.	29th.....	7600	70020
"	2345	"	"	7790	66240

Cars Weighed at Bellingham

T. E.	2099	Sept.	20th.....	7440	59640
"	2626	"	"	9020	70920
"	2380	"	"	10160	76700
"	814	"	"	8450	73020
B. & N.	653	"	"	6060	56540
T. E.	2227	"	"	7390	57600
"	2093	"	"	5510	48360
"	2386	"	"	9590	73800
C., M. & St. P.	45939	"	"	7150	58600
T. E.	2803	"	"	7460	52940
"	2585	"	"	6400	52980
"	2608	"	"	5320	47960
"	591	"	"	5320	62860
"	2276	Sept.	21st.....	8340	63300
"	2780	"	"	8210	68720

Car No.		Date	Feet	Actual net weight
T. E.	2148	" "	6530	48840
"	2400	" "	7350	58280
"	2559	" "	8720	63100
"	2606	" "	9690	73460
"	2227	Sept. 22nd.....	8540	62980
"	2612	" "	8180	65000
"	2254	" "	6630	52820
"	2834	" "	11340	81180
"	2487	" "	8690	74260
"	2142	" "	9680	72340
"	2606	Sept. 25th.....	8260	64060
"	2559	" " "	8770	64960
"	687	" "	11720	87160
"	2346	" "	9160	67420
"	2239	" "	7910	63440
"	2079	" "	10340	74080
C., M. & St. P.	405743	" "	7340	61900
Total			1150434	9449660

Average weight per F. B. M.—8.21 lbs.

[fol. 303] C., M. & St. P. Ry. Co. Exhibit 10

Cost per 1,000 Gross Tons Miles Conducting Transportation and Total Operating Cost, Not Including Taxes & Fixed Charges

Month	Idaho Divn.		Coast Divn.		Bellingham Divn.		Olympic Divn.	
	Cost trnspn.	Total oprtg.	Cost trnspn.	Total oprtg.	Cost trnspn.	Total oprtg.	Cost trnspn.	Total oprtg.
January, 1920	$1.74	$2.99	$4.18	$8.55	$7.09	$13.99	$2.92	$6.13
February	2.06	4.00	4.65	8.70	8.48	45.17	2.92	6.04
March	2.12	3.34	3.86	6.21	5.11	9.97	3.03	4.77
April	1.84	3.35	4.03	6.40	4.04	10.02	2.84	5.36
May	1.57	3.10	2.45	4.75	4.42	9.19	2.96	6.16
June	1.88	3.91	3.03	6.39	4.80	9.46	3.47	6.71
July	2.06	4.25	3.63	9.03	6.26	12.50	4.39	10.22
August	1.82	4.05	3.43	7.15	4.47	10.30	2.90	5.77
September	2.15	4.96	3.36	8.24	6.34	12.22	3.80	7.77
October	2.35	4.47	3.54	7.75	5.56	12.11	3.60	6.49
November	2.66	5.21	4.27	9.56	4.73	9.54	4.50	8.56
December	2.76	5.51	4.20	8.13	8.69	17.99	3.99	7.54
January, 1921	3.12	6.23	5.85	11.87	13.64	40.73	8.81	26.02

[fol. 304] C., M. & St. P. Ry. Co. Exhibit #11

Chicago-Milwaukee & St. Paul Railway

November, 1920

Log Operation, Washington

Stillwater to Everett (29 Miles):

1,139 cars hauled—

Gross Ton Miles, 69 x 29 x 1,139..... 2,279,139

#Cost Coast Division, Oprn. only per 1,000 G. T. M. $9.56

2,279 x $9.56 ..... $21,787.24

Revenue

1,139 cars at 7,826 B. M. Ft..... 8,913,814 ft.

8,914 M at $1.56½..... $13,950.41

Net Loss 7,836.83

——— ———, General Manager.

#Average year Coast Div. $7.57.

[fol. 305] C., M. & St. P. Ry. Co. Exhibit #12.

Chicago-Milwaukee & St. Paul Railway

November, 1920

Log Operation, Washington

Kulshan to Bellingham (25 miles):

432 cars hauled—

Gross Ton Miles, 69 x 25 x 432..... 745,200

#Cost Bel. Div., Oprn. only per 1,000 G. T. M... $9.54

745 M x $9.54 ..... $7,107.30

Revenue

432 cars at 7,826 B. M. Ft. ..... 3,380,832 ft.

3,380 M x $1.64½..... $5,560.10

Net Loss $1,547.20

#Average year Bel. Div. $14.37.

——— ———, General Manager.

[fol. 306] C., M. & St. P. Ry. Co. Exhibit #13

Chicago-Milwaukee & St. Paul Railway

November, 1920

Log Operation, Washington

Camp 2, Near Mineral to Tacoma (45 Miles):

214 cars hauled—

Gross Ton Miles, 69 x 45 x 214 664,470

#Cost Coast Div., Oprn. only per 1,000 G. T. M. $9.56

664 M x $9.56 ..... $4,547.84

Revenue

214 cars at 7,826 B. M. Ft..... 1,675,164 B. M. Ft.

1,675 x $2.65½ $4,447.12

Net Loss $100.72

#Average year Coast Div. $7.57.

—— ——, General Manager.

[fol. 307] C., M. & St. P. Ry. Co. Exhibit #14

Chicago-Milwaukee & St. Paul Railway

November, 1920

Log Operation, Washington

Independence to Preachers Slough (36 Miles):

576 Cars hauled—

Gross Ton Miles 69 x 36 x 576..... 1,430,784

#Cost Coast Divn., Oprn. Only per 1,000 G. T. M. $9.56

1,430 x $9.56 ..... $13,670.80

Revenue

576 cars at 7.826 B. M. Ft..... 4,507,776 Ft.

4,507 x $1.87½..... $8,450.62

Net Loss $5,220.18

—— ——, General Manager.

#Average year Coast Div. $7.57.

[fol. 308] C., M. & St. P. Ry. Co. Exhibit #15

Chicago-Milwaukee & St. Paul Railway

November, 1920

Log Operation, Washington

Twin River to Port Angeles (30 Miles):

1,206 Cars Hauled—

G. T. M., 69 x 30 x 1206		2,496,420
#Cost Olympic Div., Oprn. only per 1,000 G. T. M.	$6.49	
2,496 x $6.49		$16,199.04

Revenue

1,206 cars at 7,826 B. M. ft... 9,438,156 B. M. Ft.

9,438 x $1.81½		$17,129.97
Gain		$930.93

——— ———, General Manager

[fol. 309] C., M. & St. P. Ry. Co. Exhibit #16

Chicago-Milwaukee & St. Paul Railway

Approximate Cost of Log Operation of 30 Miles Haul

Equipment for 20 Loads Daily: 1 Engine, 80 Log Flats, 1 Caboose

Investment Charges:		Per month
1 Engine	$30,000.00	
80 Cars	160,000.00	
1 Cab	1,500.00	
	191,500.00	
Interest at 6%—1/12		$957.00
30 Miles Railroad at $25,000.00	$750,000.00	
Interest at 6%—1/3 of 1/12		1,250.00
Taxes	$941,500.00	
1/3 of 1/12 of 1%		262.00

#Average cost Olympic Div. year $6.80.

Operation:		Per month
Wages, train and Engine crews, $45.00 per day (26 days)		1,170.00
Wages, Track forces, 1/3 of 4 crews, 5 men each		1,040.00
1/3 Wages, 2 Station forces		183.00
1 Agent only	$200.00	
1 Agent & Opr.	350.00	
	550.00	
Log Scaler, Salary & Expense		210.00
Fuel & Supplies		1,300.00
Repairs to Engine, 30¢ per mile		468.00
Repairs to Cars: 9¢ per loaded car mile; 20 Cars per day, 26 days, 520 car miles; per day × 26 = 15,600		1,404.00
Supervision		100.00
Expenses		8,344.00

Revenue:

20 cars daily for 26 days = 520 cars.
30 mi. haul on rate, $1.885.
Average Load, 7.826 Board ft.
7.826 × $1.885 per mi. = $14.75 per car.
520 cars × $14.75 ..... $7,670.00

Expenses	$8.344.00
Revenue	7,670.00
Loss	674.00

—— ——, General Manager.

Chicago, Milwaukee and St. Paul Railway Company

Accounting Department

310. Railway Operating Revenues, 1920

Line No.	Class of railway operating revenues (a)	Total amount of revenues for the year (b)	Comparison with total revenue of preceding year (increases in black, decreases in red) (c)	Revenues earned within the State		
				On intrastate traffic (d)	On interstate traffic (e)	Total (f)
1	(101) Freight			3,017,886.86	4,347,894.87	7,365,781.73
2	(102) Passenger			1,009,965.83	930,951.97	1,940,917.80
3	(103) Excess baggage			7,087.50	8,807.22	15,894.72
4	(104) Sleeping car			71,244.79	113,770.33	185,015.12
5	(105) Parlor and chair car			4,660.36	[5.23]*	4,655.13
6	(106) Mail			85,332.56	78,642.38	163,974.94
7	(107) Express			92,503.55	85,251.15	177,754.70
8	(108) Other passenger train			525.19	469.27	994.46
9	(109) Milk			6,427.11	859.90	7,287.01
10	(110) Switching			125,297.12		125,297.12
11	(111) Special service train			2,273.18	2.83	2,276.01
12	(112) Other freight train					
13	(113) Water transfers—Freight					

[Red in copy.]

14	(114)	Water transfers—Passenger				
15	(115)	Water transfers—Vehicles & Live Stk.				
16	(116)	Water transfers—Other				
17		Total rail-line transportation—Revenue	4,423,204.05	5,566,644.69	9,989,848.74	
18	(121)	Freight				
19	(122)	Passenger				
20	(123)	Excess baggage				
21	(124)	Other passenger service				
22	(125)	Mail				
23	(126)	Express				
24	(127)	Special service				
25	(128)	Other				
26		Total water-line transportation—Revenue				
27	(131)	Dining and buffet	1,787.10	117,521.65	119,308.75	
28	(132)	Hotel and restaurant				
29	(133)	Station, train & boat privileges	6,846.33		6,846.33	
30	(134)	Parcel room	258.10		258.10	
31	(135)	Storage—Freight	15,332.29		15,332.29	
32	(136)	Storage—Baggage	6,758.46	.16	6,758.62	
33	(137)	Demurrage	41,448.03		41,448.03	
34	(138)	Telegraph & Telephone	13,795.67		13,795.67	
35	(139)	Grain elevator				

C., M. & St. P. Exhibit No. 17—Continued

Line No.	Class of railway operating revenues (a)	Total amount of revenues for the year (b)	Comparison with total revenue of preceding year (increases in black, decreases in red) (c)	Revenues earned within the State		
				On intrastate traffic (d)	On interstate traffic (e)	Total (f)
36	(140) Stockyard			1,653.22		1,653.22
37	(141) Power					
38	(142) Rents of buildings and other property			21,834.92		21,834.92
39	(143) Miscellaneous			175,481.88		175,481.88
40	Total incidental operating revenue			285,196.00	117,521.81	402,717.81
41	(151) Joint facility—Cr.			12,711.44		12,711.44
42	(152) Joint facility—Dr.					
43	Total joint facility operating revenue			12,711.44		12,711.44
44	Total railway operating revenues			4,721,111.49	5,684,166.50	10,405,277.99

Filed at Olympia, Thurston Co., Wash., June 10, 1921.

(Here follows C., M. & St. P. Exhibit No. 18, marked side folio pages 311, 312, and 313.)

CHART

TOO

LARGE

FOR

FILMING

CHART

TOO

LARGE

FOR

FILMING

TOO

LARGE

FOR

FILMING

[fol. 313a] C., M. & St. P. Exhibit No. 19

Chicago, Milwaukee and St. Paul Railway Company

Accounting Department

531-B. Statistics of Rail-Line Operations Within the State, 1920

Item No.	Item	Amount
1.	Average mileage of road operated, (miles)	1,088.84
	Train Miles:	
11.	Freight-ordinary	1,307,132
12.	" -light	53,804
13.	" -total	1,360,936
14.	Passenger	1,008,978
15.	Mixed	114,313
16.	Special	272
17.	Total transportation service	2,484,499
18.	Work service	253,136
	Locomotive Miles:	
21.	Freight-principal	1,360,936
22.	" -helper	77,809
23.	" -light	80,210
24.	" -total	1,518,955
25.	Passenger-principal	975,412
26	" -helper	30,403
27	" -light	37,322
28.	" -total	1,043,137
29.	Mixed train-principal	114,313
30.	" " -helper	30
31.	" " -light	6
32.	" " -total	114,349
33.	Special-principal	272
34.	" -helper	94
35.	" -light	.....
36.	" -total	366
37.	Train switching	168,373
38.	Yard Switching-freight	580,646
39.	" " -passenger	.....
40.	" " -total	580,646
41.	Total transportation service	3,425,826
42.	Work service	253,136
46.		
47.		
48.		
49.		
50.		

Car Miles:

Item No.	Item	Amount
51.	Freight train-loaded	29,823,395
52.	" " -empty	16,912,739
53.	Sum of loaded and empty	46,736,134
54.	Freight train-caboose	1,349,483
55.	" " -total	48,085,617
56.	Passenger train-passenger	2,086,978
57.	" " -sleeping, parlor & observation	2,615,555
58.	Passenger train-dining	551,905
59.	" " -other	1,448,892
60.	" " -total	6,703,330
61.	Mixed train-freight-loaded	607,246
62.	" " " -empty	395,704
63.	" " -caboose	4,855
64.	" " -passenger	108,182
65.	" " -sleeping, parlor and observation	.....
66.	" " -dining	.....
67.	" " -other passenger-train	1,022
68.	" " -total	1,117,009
69.	Special train-freight-loaded	4,352
70.	" " " empty	.....
71.	" " -caboose	272
72.	" " -passenger	961
73.	" " -sleeping, parlor and observation	9
74.	" " dining	.....
75.	" " -other passenger-train	.....
76.	" " -total	5,594
77.	Total transportation service	55,911,550
78.	Work service	1,931,702

Freight Service:

81.	Tons-revenue freight	6,564,916
82.	" -nonrevenue freight	574,248
83.	" -total	7,139,164
84.	Tons-miles-revenue freight	742,859,992
85.	" " -nonrevenue freight	122,614,817
86.	" " -total-net	865,474,809

Passenger Service:

91.	Passengers carried-revenue	716,102
92.	Passenger-miles-revenue	62,907,580

Revenues and Expenses:

101.	Freight revenue	$7,365,781.73
102.	Passenger revenue	1,940,917.80
103.	Passenger service train revenue	2,496,493.88
104.	Operating revenues	10,405,277.99
105.	" expenses	14,041,449.40
106.	Net operating revenues	[3,636,171.41]*

[* Red in copy.]

Averages per mile of road:

Item No.	Item	Amount
111.	Freight train miles	1,250
112.	Passenger train miles	927
113.	Mixed train miles	105
114.	Special train miles	.....
115.	Transportation service train miles	2,282
116.	Work train miles	232
117.	Locomotive miles-transportation	3,146

[fol. 314]

118.	Freight service car miles	45,092
119.	Passenger service car miles	6,258
120.	Freight revenue	$6,764.80
121.	Passenger service train revenue	2,292.80
122.	Operating revenues	9,556.30
123.	" expenses	12,895.80
124.	Net operating revenues	[3,339.49]*
125.	Ton-miles-revenue freight	682,249
126.	" -all freight	794,859
127.	Passenger-miles-revenue	57,775

Average per Train-Mile:

131.	Loaded freight car-miles-freight trains	21.91
132.	" " " " -mixed "	5.31
133.	Empty " " " -freight "	12.43
134.	" " " " -mixed "	3.46
135.	Ton miles-revenue freight	503.55
136.	" -all freight	586.66
137.	Passenger train car miles-passenger trains	6.64
138.	" " " " -mixed trains	.96
139.	Revenue passenger-miles	56.00
140.	Freight revenue	$4.99
141.	Passenger service train revenue	2.22
142.	Operating revenues	4.19
143.	" expenses	5.56
144.	Net operating revenues	[1.46]*
151.	Train miles-freight trains	.90
152.	Car miles-freight trains	31.66
153.	Train miles-passenger trains	.97
154.	Car miles-passenger trains	6.43
155.	Train miles-mixed trains	1.00
156.	Car miles-mixed trains	9.77
157.	Train miles-special trains	.74
158.	Car miles-special trains	15.28

[*Red in copy.]

Average per Loaded Freight Car Mile:

Item No.	Item	Amount
161.	Ton miles-revenue freight	24.41
162.	" -all freight	28.44
163.	Freight revenue	$.24205

Averages per Car Mile passenger:

171.	Passenger miles-revenue	13.08
172.	Passenger revenue	$.40346

Miscellaneous Averages:

181.	Miles hauled-revenue freight	113.16
182.	" " -nonrevenue freight	213.52
183.	" " -all freight	121.23
184.	Miles carried-revenue passengers	87.85
185.	Revenue per ton of freight	$1.12199
186.	" " " mile of freight	.00992
187.	" " passenger	2.71039
188.	" " passenger-mile	.03085
189.	Operating ratio	%134.95

200. State hereunder the car-miles made on the lines of the respondent within the State by privately owned freight cars and included in the items above given.

51.	Freight train-loaded	All trains	3,412,489
52.	" " empty		
53.	Sum of loaded and empty		
61.	Mixed train-freight-loaded		
62.	" " " empty		
69.	Special train-freight-loaded		
70.	" " " -empty		

Train miles for trains hauled by Motor cars are included in item 14	33,566
Electric locomotive miles are included in item 21	230,350
" " " " " " " 22	60,031
" " " " " " " 23	43,568
" " " " " " " 25	236,409
" " " " " " " 26	10,379
" " " " " " " 27	11,883
" " " " " " " 33	28
" " " " " " " 34	28
" " " " " " " 37	13,211
" " " " " " " 38	34,128
" " " " " " " 42	7,896
Car miles for trains hauled by motor cars are included in item 56	33,566

Filed at Olympia, Thurston Co., Wash., June 10, 1921.

[fol. 315]

C., M. & St. P. Exhibit No. 20

Chicago, Milwaukee & St. Paul Railway Company

Accounting Department, Bureau of Statistics

Freight Traffic Movement (Company Material Excluded) During Year Ended December 31st, 1920, State of Washington

Commodities	Rev. frt. originating on respondent's road, whole tons	Rev. frt. received from connecting carriers, whole tons	Total revenue freight, whole tons	Per cent of whole
Products of Agriculture:				
Wheat	60,349	4,930	65,279	1.1
Corn	1,199	144	1,343	..
Oats	3,304	700	4,004	.1
Other grain	2,947	100	3,047	.1
Flour and meal	29,577	1,013	30,590	.5
Other Mill products	18,555	506	19,061	.3
Hay, Straw, and Alfalfa	41,643	3,316	44,959	.7
Tobacco	225	13	238	..
Cotton	.....	....	.....	..
Cotton seed and products, except oil	51	....	51	..
Citrus fruits	67	70	137	..
Other fresh fruits	14,382	5,785	20,167	.3
Potatoes	1,577	303	1,880	.1
Other fresh vegetables	10,244	1,178	11,422	.2
Dried fruits and vegetables	1,409	254	1,663	.1
Other products of agriculture	16,418	1,372	17,790	.3
Total	201,947	19,684	221,631	3.8

Freight Traffic Movement—Continued

Commodities	Rev. frt. originating on respondent's road, whole tons	Rev. frt. received from connecting carriers, whole tons	Total revenue freight, whole tons	Per cent of whole
Products of Animals:				
Horses and mules	521	77	598	..
Cattle and calves	3,579	2,016	5,595	.1
Sheep and goats	3,497	179	3,676	.1
Hogs	167	....	167	..
Fresh meats	2,577	37	2,614	.1
Other packing-house products	781	....	781	..
Poultry	4,856	322	5,178	.1
Eggs	1,908	13	1,921	..
Butter and cheese	205	23	228	..
Wool	172	....	172	..
Hides and leather	868	42	910	..
Other products of animals	7,462	302	7,764	.1
Total	26,593	3,011	29,604	.5
Products of mines:				
Anthracite coal	1,931	57	1,988	..
Bituminous coal	52,432	34,387	86,819	1.5

Coke	28	1,610	1,638	..
Iron Ore	61	....	61	..
Other ores and concentrates	248	60	308	..
Base bullion and matte	47	....	47	..
Clay, gravel, sand and stone	124,004	2,424	126,428	2.2
Crude petroleum	80	....	80	..
Asphaltum	20	....	20	..
Salt	462	283	745	..
Other products of mines	2,964	503	3,467	.1
Total	182,277	39,324	221,601	3.8
Products of Forests:				
Logs, posts, poles and cordwood	3,190,307	3,103	3,193,410	55.4
Ties	23,222	6,493	29,715	.5
Pulpwood	6,201	....	6,201	.1
Lumber, timber, box shooks staves and headings	1,188,943	174,005	1,362,948	23.6
Other products of forest	8,172	146	8,318	.1
Total	4,416,845	183,747	4,600,592	79.7

Freight Traffic Movement—Continued

Commodities	Rev. frt. originating on respondent's road, whole tons	Rev. frt. received from connecting carriers, whole tons	Total revenue freight, whole tons	Per cent of whole
[fol. 315-1] Manufactures and Miscellaneous:				
Refined petroleum and its products	86,179	7,530	93,709	2.3
Vegetable oils	2,586	964	3,550	.1
Sugar, sirup, glucose, and molasses	959	828	1,787	..
Boats and vessel supplies	194	173	367	..
Iron, pig and bloom	247	35	282	..
Balls and fastenings	1,847	209	2,056	..
Bar and sheet iron, structural iron and iron pipe	1,646	313	1,959	..
Other metals, pig, bar and sheet	4,255	226	4,481	.1
Castings, machinery, and boilers	8,543	2,387	10,930	.2
Cement	51,413	4,968	56,381	1.0
Brick and artificial stone	20,004	1,607	21,611	.4
Lime and plaster	15,561	258	15,819	.3
Sewer pipe and drain tile	5,157	64	5,221	.1
Agricultural implements and vehicles other than automobiles	3,652	90	3,742	.1
Automobiles and autotrucks	981	130	1,111	..
Household goods and secondhand furniture	1,008	177	1,185	..
Furniture (new)	6,249	232	6,481	.1
Beverages	385	74	459	..

Ice	68	....	68	..
Fertilizers (all kinds)	295	46	341	..
Paper, printed matter, and books	.....	152	152	..
Chemicals and explosives	2,959	925	3,884	.1
Textiles	1,055	96	1,151	..
Canned goods (all canned food products)	26,360	1,938	28,298	.5
Other manufactures and miscellaneous	120,837	9,424	130,261	3.4
Total	362,440	32,846	395,286	8.7
Grand Total, Carload Traffic	5,190,102	278,612	5,468,714	96.5
Merchandise—All L. C. L. Freight	194,777	4,905	199,682	3.5
Grand Total, Carload and L. C. L. Traffic	5,384,879	283,517	5,668,396	100.0

Filed at Olympia, Thurston Co., Wash., June 22, 1921.

[fol. 316] C., M. & St. P. Exhibit 21

Chicago, Milwaukee and St. Paul Railway Company

Accounting Department, Bureau of Statistics

*Ratio Intra and Inter state Shipments Revenue Freight Carried, State of Washington

For the Year 1919

	Tons carried	Per cent	Tons carried one mile	Per cent	Freight revenue	Per cent
Intrastate	3,386,306	56.3	123,605,804	14.7	$2,201,370.38	27.5
Interstate	2,631,502	43.7	719,737,059	85.3	5,790,399.32	72.5
Total	6,017,808	100.0	843,342,863	100.0	$7,991,769.70	100.0

For the Year 1920

	Tons carried	Per cent	Tons carried one mile	Per cent	Freight revenue	Per cent
Intrastate	3,953,384	60.2	144,435,920	19.4	$3,017,886.86	41.0
Interstate	2,611,532	39.8	598,424,072	80.6	4,347,894.87	59.0
Total	6,564,916	100.0	742,859,992	100.0	$7,365,781.73	100.0

[fol. 317] C., M. & St. P. Exhibit No. 22

Valuation of Chicago, Milwaukee & St. Paul Railway (Exclusive of Equipment) in State of Washington

Chicago, Milwaukee & St. Paul Ry. to December 31, 1920	$61,386,959.57
Tacoma Eastern R. R. to December 31, 1918	3,486,057.77
Milwaukee Terminal R. R. to December 31, 1918	671,834.27
Seattle, Port Angeles & Western Ry. to December 31, 1918	2,436,824.17
Puget Sound & Willapa Harbor Ry. to December 31, 1918	3,093,910.82
Bellingham & Northern Ry. to December 31, 1918	1,939,264.58
Total Valuation	$73,014,851.18

Rec'd Feb. 20, 1922. Dept. Public Works.
Department of Public Works. Received Feb. 23, 1922.

(Here follows C., M. & St. P. Exhibit No. 23, marked side folio page 318.)

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*Item 4 request Department of Public Works, State of Washington.

[fol. 318]

C., M. & St. P. Exhibit No. 23

Chicago, Milwaukee & St. Paul Railway Company

Statement of Log Traffic, State of Washington, During the Years 1919 and 1920

Summary

		Number of loaded cars	Number of loaded car miles	Total feet B. M.	Total revenue
1919	Idaho Div., Interstate	1,365	94,856	12,005,236	$29,504.00
	" " Intrastate	136	8,007	1,164,470	2,598.09
	Coast Div.	54,125	1,234,639	390,191,366	549,806.13
	Olympic Div.	9,527	271,275	61,824,320	129,581.49
	Bellingham Div.	7,753	202,395	55,252,387	90,484.59
	Total 1919	72,906	1,811,172	520,437,779	$801,974.30
1920 Jan. to Aug.	Idaho Div., Interstate	1,716	117,824	14,626,910	$38,920.80
	" " Intrastate	28	569	214,200	357.28
	Coast Div.	45,532	1,089,328	329,358,005	485,432.56
	Olympic Div.	8,587	244,728	55,568,750	118,134.34
	Bellingham Div.	5,126	138,431	37,330,257	61,416.50
	Total Jan. to Aug. 1920	60,989	1,590,880	437,098,122	$704,261.48
1920 Sept. to Dec.	Idaho Div., Interstate	602	31,593	5,255,540	$13,405.83
	Coast Div.	17,746	318,471	140,346,884	234,969.38
	Olympic Div.	5,122	144,596	32,457,710	87,657.70
	Bellingham	2,707	84,445	21,472,726	44,389.37
	Total Sept. to Dec. 1920	26,177	579,105	199,532,860	$380,422.28
	Total 1920	87,166	2,169,985	638,630,982	$1,084,683.76
	Total 1919 and 1920	160,072	3,981,157	1,159,068,761	$1,886,658.06

Month 1919	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
Feb.	Lost Creek	Spokane	107.5	5	538	39,450	109.80
"	Worley	"	35.2	5	176	45,060	70.52
March	Lost Creek	"	107.5	18	1,935	134,710	391.53
"	Jareds	"	94.9	40	3,796	288,520	840.00
April	Lost Creek	"	107.5	1	108	6,710	21.52
"	Worley	"	35.2	19	669	140,130	252.30
"	Jareds	"	94.9	26	2,467	187,150	527.93
"	Metaline Falls	"	124.8	27	3,370	668,220	1,871.03
May	Worley	"	35.2	58	2,042	461,520	772.64
"	Jareds	"	94.9	10	949	70,590	210.00
"	Metaline Falls	"	124.8	4	499	32,000	90.08
June	Lost Creek	"	107.5	14	1,505	102,270	290.54
"	Worley	"	35.2	68	2,394	562,290	883.85
"	Metaline Falls	"	124.8	1	125	8,910	26.08
July	Lost Creek	"	107.5	12	1,290	88,030	263.11
"	Worley	"	35.2	34	1,197	306,456	479.57
"	Blanchard	"	51.3	47	2,411	452,470	961.50
"	Spirit Lake	"	43.7	58	2,535	555,030	1,110.06
Aug.	Worley	"	35.2	76	2,675	739,290	1,168.83
"	Jareds	"	94.9	38	3,606	276,900	805.91
"	Blanchards	"	51.3	39	2,001	337,120	716.37
"	Spirit Lake	"	43.7	17	743	148,830	297.66
"	Plummer	"	42.3	5	212	40,000	125.20
"	Mobart	"	33.8	19	642	204,240	307.28
Sept.	Lost Creek	"	107.5	29	3,118	221,700	638.34
"	Worley	"	35.2	91	3,203	817,120	1,287.99
"	Jareds	"	94.9	28	2,657	201,840	591.98
"	Blanchard	"	51.3	26	1,334	220,240	467.81
"	Spirit Lake	"	43.7	20	874	180,230	360.46
"	Plummer	"	42.3	16	677	133,410	209.75
"	Mozart	"	33.8	41	1,386	381,190	573.70

Idaho Division—Interstate—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
Oct.	Lost Creek	Spokane	107.5	11	1,183	91,070	244.98
"	Worley	"	35.8	4	141	32,820	51.36
"	Plummer	"	42.3	11	465	94,570	148.00
"	"	Atlas	58.4	14	818	105,086	252.50
"	Mozart	Spokane	33.8	14	473	132,800	206.06
Nov.	Lost Creek	"	107.5	4	430	33,320	91.41
"	Worley	"	35.2	14	493	131,590	205.93
"	Spirit Lake	"	43.7	1	44	8,350	16.70
"	Plummer	"	42.3	2	85	16,050	25.01
"	Bensons Spur	"	59.8	85	5,083	717,100	1,613.60
Dec.	Plummer	"	42.3	7	296	58,710	91.88
"	Bensons Spur	"	59.8	86	5,143	723,350	1,633.65
"	Bovill	Cœur d'Alene	132.1	220	29,062	1,808,810	8,200.58
	Total 1919		....	1,365	94,856	12,005,236	29,504.00
1920							
Jan.	Bovill	Cœur d'Alene	132.1	179	23,646	1,370,170	6,284.73
"	Mozart	Spokane	33.8	52	1,758	451,760	679.90
Feb.	Worley	"	35.2	6	211	54,320	85.01
"	Blanchard	"	51.3	54	2,770	506,450	1,645.96
"	Plummer	"	42.3	2	85	16,460	26.35
"	Bensons Spur	"	59.8	32	1,914	308,460	694.03
"	Bovill	Cœur d'Alene	132.1	119	15,720	997,530	4,505.61
"	Mozart	Spokane	33.8	7	237	66,640	100.29
March	Worley	"	35.2	6	211	44,310	67.55
"	Blanchard	"	51.3	43	2,206	401,260	852.58
"	Bensons Spur	"	59.8	248	14,830	2,215,190	4,984.18
"	Bovill	Cœur d'Alene	132.1	61	8,058	505,650	2,288.67
April	Lost Creek	Spokane	107.5	4	430	31,610	88.56
"	Worley	"	35.2	15	528	118,490	198.24
"	Bensons Spur	"	59.8	184	11,003	1,649,850	3,712.22
"		Atlas	103.1	1	103	8,450	22.75

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May	Lost Creek	Spokane	107.5	4	430	35,340	95.06
"	Worley	"	35.2	57	2,006	265,510	447.34
"	Blanchard	"	51.3	30	1,539	258,020	548.29
"	Plummer	"	42.3	5	212	53,620	83.81
"	Bensons Spur	"	59.8	32	1,914	294,420	662.44
June	Lost Creek	"	107.2	2	215	14,310	43.04
"	Worley	"	35.2	65	2,288	517,870	845.90
"	Blanchard	"	51.3	69	3,540	619,070	1,671.16
"	Plummer	"	42.3	8	338	70,150	109.74
"	Bensons Spur	"	59.8	85	5,083	766,080	1,723.68
July	Worley	"	35.2	13	458	116,500	182.32
"	Blanchard	"	51.3	29	1,488	259,580	551.61
"	Plummer	"	42.3	13	550	116,570	181.43
"	Bensons Spur	"	59.8	35	2,093	323,390	727.63
Aug.	Worley	"	35.2	128	4,506	1,003,400	1,666.16
"	Blanchard	"	51.3	52	2,668	520,590	1,691.83
"	Plummer	"	42.3	9	381	76,270	120.37
"	Bensons Spur	"	59.8	58	3,468	503,460	1,132.80
"	Ione	Atlas	103.1	7	722	49,700	155.64
"	Lost Creek	Spokane	107.5	2	215	16,460	43.94
	Total Jan. 1st to Aug. 31st, 1920		....	1,716	117,824	14,626,910	38.920.80
Sept.	Worley	Spokane	35.2	16	563	112,780	285.60
"	Blanchard	"	51.3	44	2,257	400,620	1,023.68
"	Spirit Lake	"	43.7	36	1,573	341,440	865.15
"	Plummer	"	42.3	6	254	56,800	112.04
"	Bensons Spur	"	59.8	114	6,817	1,019,930	2,881.10
"	Lost Creek	"	107.5	8	860	65,310	220.45
"	Ione	"	117.2	8	938	57,610	220.16
"	"	Atlas	103.1	1	103	7,360	26.92
"	Mozart	Spokane	33.8	27	913	272,730	512.73
Oct.	Lost Creek	"	107.5	8	860	65,270	219.30
"	Worley	"	36.2	8	282	68,000	132.04

Idaho Division—Interstate—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
Oct.	Blanchard	Spokane	51.3	35	1,796	298,760	763.33
"	Spirit Lake	"	43.7	11	481	104,380	269.31
"	Bensons Spur	"	59.6	73	4,365	641,240	1,804.09
"	Ione	Atlas	103.1	5	516	40,000	134.60
"	Mozart	Spokane	33.8	25	845	200,510	376.96
Nov.	Lost Creek	"	107.5	2	215	15,160	53.76
"	Worley	"	35.2	18	634	157,780	311.47
"	Blanchard	"	51.3	43	2,206	397,230	1,014.92
"	Bensons Spur	"	59.8	47	2,811	391,910	1,103.23
"	Mozart	"	33.8	36	1,217	287,000	593.66
Dec.	Worley	"	35.2	4	141	36,740	70.83
"	Plummer	"	42.3	4	169	32,980	64.58
"	Mozart	"	33.8	23	777	184,000	345.92
	Total Sept. 1st to Dec. 31, 1920		....	602	31,593	5,255,540	13,405.83
	Total 1920		....	2,318	149,417	19,882,450	52,326.63
	Total 1919 and 1920		....	3,683	244,273	31,887,686	81,830.63

[fol. 318-3]

Idaho Division—Intrastate

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
1919							
June	Cusick Creek	Cusick	8.1	3	24	24,000	31.56
"	Tweedie	Ione	60.1	21	1,262	174,490	393.08
July	Tweedie	Ione	60.1	112	6,721	965,980	2,173.45
	Total 1919		....	136	8,007	1,164,470	2,598.09
1920							
May	Cusick Creek	Cusick	8.1	14	113	112,000	147.28
July	Ione	Cusick	32.6	14	456	102,200	210.00
	Total 1920		....	28	569	214,200	357.28

[fol. 318-4]

Coast Division

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
1919							
Jan.	Cedar Falls	Selleck	6.3	348	2,192	2,784,000	3,480.90
"	Saginaw	Gregory Spur	38.8	18	698	150,498	288.79
"	McKenna	" "	12.6	18	227	98,660	225.68
"	Cedarville	Hoquiam	35.2	107	3,766	909,941	1,263.79
"	Rainier	Kapowsin	35.2	44	1,549	175,609	353.18
"	Gregory	"	40.2	3	121	21,962	43.92
"	Morgan Lake	"	1.4	6	8	53,391	53.39
"	" "	"	1.4	23	32	141,546	173.81
"	Tanwax	"	3.3	26	86	167,361	167.35
"	"	"	3.3	82	271	518,935	517.17
"	High Rock	Duval	5.7	13	74	78,000	101.77
"	Monroe	Everett	14.1	5	71	34,250	47.36
"	"	"	14.1	12	169	94,810	129.23
"	High Rock	Riverview	13.3	49	652	391,940	463.19
"	" "	"	13.3	70	931	562,720	863.49
"	Bandera	Everett	68.8	14	963	105,010	340.63
"	Cedar Falls	"	54.8	154	8,439	1,234,180	2,237.52
"	Stillwater	Riverview	24.4	54	1,318	384,000	480.00
"	Tanwax	Midland	15.5	59	915	375,234	536.15
"	Kirby	"	8.6	31	267	191,394	223.82
"	Morgan Lake	"	14.0	118	1,652	866,505	1,142.77
"	Camp 16	Mineral	1.0	69	69	430,472	480.47
"	" 25	"	5.1	67	342	418,681	418.68
"	Morgan Lake	Harding	4.6	11	51	80,554	84.82
Feb.	Cedar Falls	Selleck	6.3	455	2,866	3,640,000	4,550.00
"	Morgan Lake	Kapowsin	1.4	35	49	230,472	230.48
"	" "	"	1.4	55	77	374,552	406.25
"	Tanwax	"	3.3	13	43	113,018	113.01
"	"	"	3.3	29	96	245,987	200.94
"	Gregory Spur	"	40.2	7	281	186,962	105.48
"	Saginaw	Gregory Spur	38.8	90	3,492	806,245	1,521.50
"	East Forks	" "	81.1	14	1,135	94,020	242.22

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
Feb.	High Rock	Duval	5.7	64	365	384,000	463.95
"	Bandera	Everett	68.8	16	1,101	109,100	265.89
"	Cedar Falls	"	54.8	236	12,933	1,865,250	3,405.57
"	Monroe	"	14.1	65	917	657,590	864.68
"	High Rock	Riverview	13.3	20	266	164,350	201.61
"	Stillwater	"	24.4	231	5,636	1,583,275	2,085.45
"	Camp 25	Elbe	3.4	75	255	521,545	516.05
"	Tanwax	Midland	15.5	18	279	122,332	171.97
"	Kirby	"	8.6	65	559	425,191	459.69
"	Morgan Lake	"	14.0	109	1,526	762,367	982.23
"	Camp 16	Mineral	1.0	173	173	1,134,414	1,134.43
"	Camp 25	"	5.1	21	107	134,024	134.03
"	East Fork	"	10.2	15	153	102,413	119.90
"	Morgan Lake	Harding	4.6	14	64	81,397	84.69
March	Cedar Falls	Ellensburg	29.5	5	398	34,637	71.25
"	" "	Selleck	6.3	489	3,081	3,932,000	4,915.80
"	Elbe	Kapowsin	24.2	61	1,476	488,448	600.32
"	"	"	24.2	106	2,565	652,290	1,065.25
"	Morgan Lake	"	1.4	7	10	50,364	50.36
"	" "	"	1.4	19	27	137,920	145.76
"	Tanwax	"	3.3	25	83	157,858	157.86
"	"	"	3.3	48	158	318,123	338.92
"	Gregory Spur	"	40.2	2	80	14,956	29.91
"	Saginaw	Preachers Slough	16.0	28	448	243,187	302.61
"	"	Gregory Spur	38.8	34	1,319	333,014	509.96
"	Harding	Kapowsin	8.0	1	8	6,000	7.14
"	Sutico	Sunset Dump	9.9	551	5,455	4,506,000	5,925.39
"	Burt	" "	15.9	86	1,367	923,579	1,329.92
"	High Rock	Duval	5.7	36	205	218,000	282.87
"	East Fork	Gregory Spur	83.7	1	84	7,000	18.05
"	High Rock	Riverview	13.3	176	2,341	1,407,310	1,986.15
"	Stillwater	Riverview	24.4	993	22,033	5,488,729	6,804.81
"	Camp 25	Elbe	3.4	863	2932	[illegible]	951.98

March	Morgan Lake	Midland	14.0	257	3,598	1,924,395	2,493.72
"	Williamson	Mineral	7.5	35	263	211,458	246.52
"	Camp 16	"	1.0	194	194	1,347,545	1,360.02
"	Camp 25	"	5.1	23	117	140,455	140.45
"	East Fork	"	10.2	50	510	314,310	367.25
"	" "	Harding	48.9	44	2,152	296,380	562.45
"	High Rock	Everett	18.1	12	217	120,030	184.65
"	Cedar Falls	"	54.8	80	4,384	573,106	1,040.56
April	Easton	Ellensburg	36.8	17	626	124,370	250.02
"	Cedar Falls	"	79.5	18	1,431	127,349	334.50
"	" "	Selleck	6.3	514	3,238	4,100,000	5,050.69
"	Elbe	Kapowsin	24.2	36	871	218,533	341.99
"	"	"	24.2	55	1,331	367,420	596.04
"	Harding	"	8.9	2	16	12,000	13.59
"	Morgan Lake	"	1.4	19	27	130,160	130.16
"	" "	"	1.4	43	60	280,199	309.06
"	Tanwax	"	3.3	48	158	328,632	328.79
"	"	"	3.3	80	264	593,221	541.80
"	Gregory Spur	"	40.2	3	121	22,989	45.80
"	Saginaw	Gregory Spur	38.8	23	892	298,390	438.62
"	Cedarville	Hoquiam	35.2	216	7,603	1,771,504	2,463.36
"	Sutico	Sunset Dump	9.9	684	6,772	5,453,475	7,171.35
"	Burt	" "	15.9	150	2,385	2,383,759	3,432.67
"	High Rock	Duval	5.7	44	251	258,000	340.51
"	East Fork	Gregory Spur	83.7	8	670	56,000	142.73
"	Cedar Falls	Everett	54.8	201	11,015	1,716,160	3 092.62
"	High Rock	"	18.1	45	815	378,510	587.88
"	" "	Riverview	13.3	247	3,285	2,045,390	2,533.99
"	Stillwater	"	24.4	1,364	33,282	8,184,000	10,239.00
"	Camp 25	Elbe	3.4	7	24	44,415	47.30
"	Cowlitz Jct	"	12.5	11	138	58,334	81.36
"	Tanwax Jct	Midland	15.5	36	558	225,321	319.31
"	Morgan Lake	"	14.0	162	2,268	1,182,585	1,462.67
"	Lindberg	Mineral	11.7	78	913	460,751	607.85
"	Williamson	Mineral	7.5	2	15	12,000	13.50

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
April	Camp 16	Mineral	1.0	136	136	862,423	916.52
"	Camp 25	Mineral	5.1	13	66	78,728	81.51
"	East Fork	Mineral	10.2	59	602	349,767	403.73
"	Tanwax	Harding	7.5	9	68	54,000	62.31
"	East Fork	"	48.9	30	1,467	190,653	333.61
"	" "	Salsich Jct	52.7	9	474	57,074	102.00
"	Tanwax Jct	" "	9.9	22	218	140,298	152.61
May	Easton	Ellensburg	36.8	4	147	30,870	61.74
"	Keechelos	"	52.1	1	52	7,000	14.88
"	Cedar Falls	"	29.5	22	1,749	166,017	423.33
"	Cedar Falls	Selleck	6.3	370	2,331	2,960,000	3,700.40
"	Elbe	Kapowsin	24.2	6	145	36,254	58.81
"	"	"	24.2	10	242	62,147	106.03
"	Morgan Lake	"	1.4	20	28	126,925	126.93
"	" "	"	1.4	24	34	150,064	159.78
"	Camp 16	"	31.7	21	666	143,901	239.82
"	Camp 17	"	31.3	54	1,690	394,276	590.53
"	"	"	31.3	94	2,942	542,705	912.94
"	Mineral	"	30.7	3	92	18,022	29.29
"	"	"	30.7	8	246	131,152	95.20
"	Tanwax	"	3.3	17	56	110,860	110.86
"	"	"	3.3	16	53	109,659	116.80
"	Camp 16	Tacoma	54.7	58	3,173	334,710	773.23
"	"	"	54.7	118	6,455	754,770	1,649.73
"	Camp 17	"	54.3	38	2,063	221,840	478.66
"	"	"	54.3	45	2,444	287,180	611.45
"	Gregory Spur	Kapowsin	40.2	4	161	31,052	62.10
"	Morgans Lake	Tacoma	21.6	87	1,879	547,847	669.05
"	" "	"	21.6	199	4,298	1,279,951	1,745.77
"	Tanwax	"	22.5	84	1,890	517,346	649.73
"	"	"	22.5	153	3,443	1,011,960	1,674.05

[fol. 318-6]

May	Saginaw	Preachers Slough	16.0	3	48	22,710	29.02
"	"	Tacoma	78.4	1	78	6,976	17.08
"	East Forks	Gregory Spur	83.7	85	7,115	616,625	1,569.36
"	" "	Tacoma	63.9	19	1,214	123,610	271.80
"	" "	"	63.9	37	2,364	259,080	590.58
"	" "	McKenna	68.5	207	14,180	1,370,520	2,849.68
"	Cedarville	Hoquiam	35.2	270	9,504	2,178,481	3,022.66
"	Sutico	Sunset Dump	9.9	743	7,356	6,393,580	8,407.58
"	Burt	" "	15.9	194	3,085	2,134,372	3,073.53
"	Horrocks Spur	Duval	6.8	26	177	156,000	200.46
"	High Rock	"	5.7	26	148	156,000	202.63
"	Cedar Falls	Everett	54.8	606	33,209	4,990,460	8,780.17
"	Horrocks	"	34.5	30	1,035	232,950	440.04
"	High Rock	"	18.1	36	652	316,570	519.03
"	" "	Riverview	13.2	348	4,594	1,229,454	3,696.81
"	Stillwater	"	24.4	1,162	28,353	7,271,600	9,061.86
"	Camp 17	Elbe	7.1	32	227	212,774	245.71
"	Camp 16	"	7.5	3	23	18,000	21.39
"	Cowlitz Jct	"	12.5	21	263	102,000	162.18
"	Lindberg	"	18.2	5	91	31,432	42.42
"	Camp 16	Midland	49.1	42	2,062	306,498	530.92
"	Camp 17	"	48.7	55	2,679	340,550	588.58
"	Tanwax Jct	"	15.5	58	899	381,340	526.23
"	Eatonville	"	28.0	4	112	24,000	38.28
"	Morgan Lake	"	14.0	81	1,134	545,011	708.93
"	Mineral	"	46.1	10	480	73,704	127.76
"	Williamson	Mineral	7.5	2	15	14,300	17.02
"	Camp 16	"	1.0	1	1	6,962	7.41
"	East Fork	"	10.2	33	337	209,796	263.68
"	" "	Harding	48.9	31	1,516	202,437	356.78
"	" "	Salsich Jct	52.7	89	4,690	573,202	962.90
"	Elbe	" "	36.0	4	144	21,410	39.78
"	Tanwax Jct	" "	9.9	26	257	167,115	198.11
"	Camp 16	" "	43.5	12	522	82,038	140.82

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
May	Camp 17	Salsich Jct	43.1	42	1,810	148,924	429.83
June	Keechelus	Ellensburg	52.1	83	3,324	614,287	1,307.21
"	Whittier	"	45.8	8	366	56,060	119.33
"	Cedar Falls	"	79.5	11	874	97,575	243.77
"	" "	Sellick	6.3	367	2,312	2,936,000	3,520.00
"	Morgan Lake	Kapowsin	1.4	8	11	51,422	51.43
"	" "	"	1.4	11	15	72,878	77.61
"	Tanwax	"	3.3	21	69	131,440	131.44
"	"	"	3.3	21	69	135,768	144.66
"	Camp 17	"	31.3	27	845	166,470	260.52
"	"	"	31.3	44	1,377	270,332	440.27
"	"	Tacoma	54.3	63	3,420	336,280	797.44
"	"	"	54.3	90	4,887	512,120	1,182.20
"	Williamson	"	46.2	3	138	18,050	43.73
"	Gregory Spur	Kapowsin	41.2	6	241	43,308	86.62
"	Camp 16	"	31.7	7	221	45,381	73.75
"	"	"	31.7	43	1,363	282,755	477.84
"	"	Tacoma	54.7	53	2,899	327,180	751.89
"	"	"	54.7	60	3,282	422,220	948.25
"	Morgan Lake	"	21.6	135	2,916	867,717	1,103.67
"	" "	"	21.6	280	6,048	1,852,920	2,546.10
"	Tanwax	"	22.5	47	1,057	266,254	347.78
"	"	"	22.5	115	2,587	688,474	924.28
"	Saginaw	McKenna	51.4	20	1,028	228,608	421.93
"	"	Preachers Slough	16.0	1	16	9,974	17.45
"	"	Tacoma	78.4	2	156	23,428	58.57
"	East Forks	Gregory Spur	83.7	54	4,519	405,870	1,037.01
"	National	Tacoma	53.1	2	106	12,000	27.00
"	East Forks	McKenna	68.5	232	15,892	1,593,313	2,908.43
"	Cedarville	Hoquiam	35.2	237	8,342	1,919,719	2,130.20
[fol. 318-7]							
June	Sutico	Sunset Dump	9.9	577	5,712	4,957,270	6,518.84
"	Burt	" "	15.9	162	2,575	204,321	294.19

"	Horrocks Spur	Duval	6.8	32	217	182,000	247.41
"	High Rock	"	5.7	32	182	192,000	252.48
"	Bandera	Riverview	64.0	33	2,112	258,008	597.32
"	"	Everett	68.8	63	4,334	536,770	1,264.15
"	Monroe	"	14.1	23	324	218,650	361.36
"	Cedar Falls	"	54.8	337	18,468	2,662,880	3,605.89
"	Horrocks	"	34.5	30	1,035	213,870	412.39
"	High Rock	"	18.1	20	362	159,470	327.66
"	" "	Riverview	13.3	487	6,477	3,734,940	4,475.74
"	Stillwater	"	24.4	1,375	33,550	8,321,020	10,405.09
"	Monroe	"	9.3	88	818	853,679	1,094.62
"	Horrocks	"	29.6	5	148	36,810	68.88
"	Snoqualmie	"	37.7	114	4,298	861,886	1,710.77
"	Williamson	Elbe	1.0	4	4	27,822	34.12
"	Camp 17	"	7.1	16	114	96,039	112.31
"	Carlson	"	8.3	16	133	105,280	122.29
"	Cowlitz Jct	"	12.5	19	238	121,354	149.40
"	Lindberg	"	18.2	10	182	61,310	85.31
"	East Fork	Midland	58.3	6	350	44,048	86.10
"	Camp 16	"	49.1	37	1,817	249,477	450.65
"	Camp 17	"	48.7	79	3,847	490,680	848.07
"	Tanwax Jct	"	15.5	133	2,062	871,122	1,241.87
"	Mineral	"	48.1	23	1,106	125,879	217.68
"	Williamson	Mineral	7.5	17	128	107,965	132.67
"	Camp 16	"	1.0	37	37	251,869	278.25
"	East Fork	"	10.2	15	153	94,548	113.82
"	" "	Harding	48.9	30	1,467	219,864	378.53
"	" "	Salsich Jct	52.7	99	5,217	716,212	1,264.46
"	Camp 17	" "	43.1	5	216	30,090	52.14
"	Mineral	Fredrickson	43.2	2	86	15,854	27.80
July	Keechelus	Ellensburg	52.1	91	4,741	666,113	1,417.42
"	Cedar Falls	Sellick	6.3	150	945	1,200,000	1,542.90
"	Bandera	Kent Spur	17.0	15	255	105,000	180.81
"	Elbe	Kapowsin	24.2	7	169	43,118	69.10
"	"	"	24.2	2	48	13,260	22.14
"	Mineral	"	30.7	17	522	82,787	150.02
"	"	"	30.7	16	491	105,945	176.34

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
July	Tanwax	Kapowsin	3.3	25	83	169,040	169.04
"	"	"	3.3	29	96	174,503	211.68
"	Camp 17	Tacoma	54.3	45	2,444	242,050	556.78
"	"	"	54.3	103	5,593	560,410	1,345.12
"	Gregory Spur	"	39.6	2	79	14,690	28.00
"	" "	"	39.6	2	79	13,400	28.00
"	" "	Kapowsin	40.2	4	161	29,729	59.46
"	Camp 16	Tacoma	54.7	27	1,477	142,050	362.23
"	"	"	54.7	47	2,511	266,300	630.77
"	Morgans Lake	"	21.6	94	2,030	557,052	729.62
"	" "	"	21.6	126	2,722	783,829	1,090.16
"	National	"	53.1	3	159	18,107	40.74
"	Tanwax	"	22.5	18	405	96,502	145.82
"	"	"	22.5	46	1,035	244,143	379.86
"	Saginaw	McKenna	51.4	29	1,491	308,711	656.07
"	East Fork	Tacoma	63.9	5	320	34,410	73.17
"	" "	"	63.9	11	703	73,050	162.44
"	" "	McKenna	68.5	68	4,658	498,977	900.15
"	Cedarville	Hoquiam	35.2	167	5,878	1,240,772	1,867.65
"	Cedar Falls	Tacoma	57.9	116	8,155	944,880	2,056.12
"	" "	"	57.9	134	7,759	1,123,700	2,579.82
"	Mineral	Kapowsin	30.7	1	31	7,132	13.37
"	East Forks	Gregory Spur	83.7	51	4,269	375,570	943.04
"	Moose	Sunset Dump	5.0	64	320	476,370	626.45
"	Doris	" "	17.4	111	1,931	1,187,063	1,857.60
[fol. 318-8]							
July	Sutico	Sunset Dump	9.9	429	4,247	3,522,460	4,632.08
"	Burt	" "	15.9	111	1,765	145,136	208.94
"	High Rock	Duval	5.7	39	222	234,000	304.10
"	Bandera	Riverview	64.0	45	2,880	359,030	694.26
"	"	Everett	68.8	77	5,298	637,920	1,503.48
"	Monroe	"	14.1	30	508	331,948	517.24

"	Cedar Falls	"	54.8	228	12,494	1,826,916	3,263.28
"	Rockdale	"	73.8	16	1,181	126,030	305.39
"	Camp 12	"	51.9	1	52	6,530	11.03
"	High Rock	Riverview	13.3	131	1,742	1,059,560	1,274.61
"	Stillwater	"	24.4	565	13,786	3,424,550	4,289.96
"	Monroe	"	9.3	88	818	675,459	901.01
"	Snoqualmie	"	37.7	99	3,732	758,462	1,504.93
"	Camp 17	Elbe	7.1	60	426	419,344	406.40
"	Camp 15	"	7.5	30	224	191,836	215.84
"	Morton	"	20.6	31	639	186,000	265.77
"	Camp 16	Midland	49.1	22	1,080	148,314	255.24
"	Camp 17	"	48.7	29	1,412	185,276	319.98
"	Tanwax Jct	"	15.5	98	1,519	666,867	939.48
"	Morgan Lake	"	14.0	6	84	40,881	52.38
"	Williamson	Mineral	7.5	8	60	50,977	59.01
"	Camp 16	"	1.0	6	6	38,005	39.91
"	East Fork	"	10.2	17	173	109,274	125.84
"	" "	Salsich Jct	52.7	89	4,690	601,999	1,113.92
"	Tanwax Jct	" "	9.9	21	208	132,014	142.68
"	Mineral	Fredrickson	43.2	8	346	52,460	78.53
August	Keechelus	Eliensburg	52.1	88	4,585	654,730	1,387.51
"	Cedar Falls	Selleck	6.3	679	3,648	4,630,000	5,790.50
"	Bandera	Kent Spur	17.0	106	1,802	742,000	1,271.62
"	Elbe	Kapowsin	24.2	3	73	18,000	27.00
"	"	"	24.2	3	73	18,808	29.34
"	Fredrickson	"	11.8	8	94	48,648	60.81
"	"	"	11.8	12	142	68,203	97.55
"	Tanwax	"	3.3	57	188	383,091	383.09
"	"	"	3.3	104	343	706,334	774.87
"	Camp 17	"	31.3	2	63	12,000	19.50
"	"	"	31.3	10	313	61,821	104.08
"	"	Tacoma	54.3	23	1,249	130,670	293.70
"	"	"	54.3	39	2,118	220,220	499.72
"	Gregory Spur	"	39.6	2	79	14,850	29.70
"	" "	Kapowsin	40.2	2	80	14,460	28.92
"	Camp 16	Tacoma	54.7	35	1,915	211,250	465.70
"	"	"	54.7	60	3,282	351,740	824.01

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
Aug.	Morgans Lake	Tacoma	21.6	20	432	102,212	161.57
"	" "	"	21.6	37	799	201,694	319.91
"	Tauwax	"	22.5	7	158	48,976	66.08
"	"	"	22.5	17	383	92,349	129.67
"	Saginaw	McKenna	61.4	88	4,523	793,512	1,099.18
"	East Fork	McKenna	68.5	176	12,056	1,280,580	2,277.30
"	" "	Tacoma	63.9	1	64	6,260	13.30
"	" "	"	63.9	1	64	3,530	13.14
"	Cedarville	Hoquiam	35.2	244	8,588	1,963,524	2,766.62
"	East Fork	Gregory Spur	83.7	43	3,599	330,100	855.45
"	Doris	Sunset Dump	17.4	246	4,280	1,886,781	2,952.80
"	Sutico	" "	9.9	507	5,019	4,090,200	5,378.61
"	Burt	" "	15.9	190	3,021	1,299,204	1,870.84
"	High Rock	Duval	5.7	34	194	204,000	238.88
"	Chehalis	Gregory Spur	26.0	22	572	193,296	592.46
"	Bandera	Riverview	64.0	4	256	30,590	70.88
"	"	Everett	68.8	82	5,642	728,650	1,649.64
"	Monroe	"	14.1	24	338	207,650	331.82
"	Cedar Falls	"	54.8	145	7,946	1,092,537	1,950.79
"	Rockdale	"	73.8	55	4,059	445,020	1,060.32
"	Camp 12	"	51.9	24	1,246	191,560	412.93
"	Horrocks	"	34.5	69	2,381	566,380	1,095.93
"	High Rock	Riverview	13.3	417	5,546	3,000,860	3,378.82
"	Stillwater	"	24.4	1,274	31,086	7,858,810	9,801.10
"	Monroe	"	9.3	310	2,883	2,589,770	3,237.16
"	Williamson	Elbe	1.0	2	2	12,000	12.39
"	Camp 17	"	7.1	77	547	536,427	556.49
[fol. 318-9]							
Aug.	Lindberg	Elbe	18.2	36	655	219,433	310.21
"	Morton	Elbe	20.6	11	227	66,000	94.26
"	East Fork	Elbe	16.7	3	50	18,150	21.60
"	Camp 16	Midland	49.1	8	393	67,104	115.97

"	Camp 17	"	48.7	8	390	59,507	102.45	
"	Tanwax Jct	"	15.5	142	2,201	1,036,000	1,346.84	
"	Morgan Lake	"	14.0	23	322	145,033	184.58	
"	Morton	Mineral	14.1	2	28	12,000	12.00	
"	Williamson	Mineral	7.5	47	353	1,753,226	346.62	
"	Camp 16	Mineral	1.0	85	85	4,708,089	621.07	
"	East Fork	Mineral	10.2	16	163	498,462	117.31	
"	Tanwax Jct	Harding	7.5	12	90	90,707	106.71	
"	East Fork	Salsich Jct	52.7	28	1,476	208,510	382.09	
"	Tanwax Jct	" "	9.9	26	257	190,256	220.99	
Sept.	Keechelus	Ellensburg	52.1	81	4,220	584,402	1,235.98	
"	Cedar Falls	Selleck	6.3	597	3,761	4,776,000	5,900.40	
"	Pandera	Kent Spur	17.0	66	1,122	462,000	792.96	
"	Morgans Lake	Kapowsin	1.4	1	1	6,000	6.00	
"	" "	"	1.4	3	4	18,326	19.52	
"	Mineral	"	30.7	1	31	6,048	10.22	
"	Fredrickson	"	11.8	6	71	66,778	85.47	
"	"	"	11.8	16	189	66,000	86.79	
"	Tanwax	"	3.3	90	297	600,490	627.69	
"	"	"	3.3	134	442	1,164,596	1,001.91	
"	Graham	Tacoma	15.9	2	32	12,030	16.54	
"	"	"	15.9	3	48	18,282	25.42	
"	Williamson	"	46.2	1	46	6,714	15 11	
"	"	"	46.2	2	92	10,953	29.53	
"	Gregory Spur	Kapowsin	40.2	2	80	14,000	28.00	
"	Camp 16	Tacoma	54.7	1	65	5,680	12.75	
"	"	"	54.7	3	164	14,810	39.55	
"	Morgans Lake	"	21.6	69	1,490	354,610	514.35	
"	" "	"	21.6	87	1,879	474,390	710.21	
"	Tanwax	"	22.5	12	270	58,000	88.60	
"	"	"	22.5	31	698	152,740	238.38	
"	Independence	Preachers Slough	33.2	115	3,818	966,343	1,511.49	
"	Saginaw	McKenna	51.4	28	1,439	271,184	593.91	
"	East Fork	"	68.5	197	13,494	1,411,590	2,528.48	
"	" "	Tacoma	63.9	4	256	27,450	54.48	
"	" "	"	63.9	5	320	98,250	78.06	
"	Cedarville	Hoquiam	35.2	231	8,131	2,071,915	2,863.31	

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
Sep.	Chehalis	Gregory Spur	26.0	13	338	107,625	251.02
"	Doris	Sunset Dump	17.4	188	3,271	1,402,291	2,194.55
"	Sutico	" "	9.9	443	4,386	3,843,610	5,054.33
"	Burt	" "	15.9	232	3,689	1,892,543	2,723.30
"	High Rock	Duval	5.7	58	331	348,000	451.59
"	Monroe	Everett	14.1	40	564	330,421	569.20
"	Cedar Falls	"	54.8	20	1,096	147,610	256.44
"	Rockdale	"	73.8	97	7,159	860,385	2,089.88
"	Keechelus	"	84.7	14	1,186	82,911	239.32
"	Camp 12	"	51.9	132	6,851	900,220	2,120.91
"	Horrocks	"	34.5	93	3,209	695,824	1,386.27
"	High Rock	Riverview	13.3	557	7,408	3,929,605	4,538.36
"	Stillwater	"	24.4	1,220	29,768	7,320,000	9,149.50
"	Monroe	"	9.3	461	4,287	4,138,310	4,696.92
"	Camp 17	Elbe	7.1	1	7	6,000	6.00
"	Lindberg	"	18.2	6	109	42,003	58.86
"	Morton	"	20.6	7	144	42,000	64.56
"	East Fork	Midland	58.3	17	991	121,218	218.01
"	Camp 16	"	49.1	9	442	65,853	116.78
"	Camp 17	"	48.7	1	49	6,000	10.89
"	Tanwax Jct	"	15.5	140	2,170	931,201	1,315.55
"	Morgan Lake	"	14.0	51	714	359,464	461.77
"	Williamson	Mineral	7.5	39	293	246,924	292.20
"	Camp 16	"	1.0	233	233	1,690,892	1,687.87
"	Camp 17	"	8.8	143	1,258	907,866	944.10
"	East Fork	"	10.2	6	61	39,384	49.08
"	Tanwax Jct	Salsich Jct	9.9	3	30	14,830	21.03
"	East Fork	" "	52.7	87	4,585	648,130	1,069.27
[fol. 318-10]							
Sep.	Polk Jct	Salsich Jct	38.4	2	77	14,520	23.60
"	Graham	" "	4.7	1	5	6,000	6.39
"	Camp 16	" "	43.5	4	174	36,254	63.44

"	Harding	" "	3.8	4	15	24,000	25.56
"	Mineral	Fredrickson	43.2	4	173	24,158	41.46
Oct.	Keechelus	Ellensburg	52.1	63	3,282	447,466	950.75
"	Cedar Falls	Selleck	6.3	573	3,610	4,584,000	5,729.30
"	Bandera	"	20.3	12	244	84,000	147.00
"	"	Kent Spur	17.0	65	1,105	455,000	781.77
"	Morgans Lake	Kapowsin	1.4	1	1	6,770	7.21
"	Mineral	"	30.7	1	31	8,743	12.59
"	Fredrickson	"	11.8	5	59	35,500	44.38
"	"	"	11.8	24	283	143,680	196.82
"	Tanwax	"	3.3	71	234	486,630	486.63
"	"	"	3.3	87	287	577,612	659.06
"	Gregory Spur	Kapowsin	40.2	8	322	60,681	121.36
"	Camp 16	"	31.7	5	159	34,151	55.49
"	"	"	31.7	1	32	6,786	11.47
"	Midland	Tacoma	5.6	2	11	14,420	31.58
"	Morgans Lake	"	21.6	50	1,080	276,580	387.85
"	" "	"	21.6	98	2,117	556,380	807.87
"	Tanwax	"	22.5	40	900	196,790	284.82
"	"	"	22.5	45	1,013	242,280	364.13
"	Independence	Preachers Slough	33.2	353	11,719	2,547,808*	3,959.81
"	Saginaw	McKenna	51.4	4	206	33,314	62.58
"	East Fork	"	68.5	1	69	6,910	12.54
"	" "	Tacoma	63.9	162	10,352	1,077,630	2,391.44
"	" "	"	63.9	228	14,569	1,500,550	3,573.92
"	Cedarville	Hoquiam	35.2	218	7,673	1,867,035	2,614.83
"	Sparr	"	63.1	4	252	37,800	87.56
"	Mineral	Fredrickson	43.2	7	302	51,200	90.80
"	Doris	Sunset Dump	17.4	245	4,263	2,122,263	3,321.40
"	Sutico	" "	9.9	502	4,970	4,111,520	5,406.62
"	Burt	" "	15.9	211	3,555	1,919,933	2,764.80
"	High Rock	Duval	5.7	52	296	316,000	351.61
"	Monroe	Everett	14.1	33	465	328,480	533.43
"	Rockdale	"	73.8	83	6,125	636,684	1,548.92
"	Keechelus	"	84.7	16	1,355	112,736	277.42
"	Camp 12	"	51.9	78	4,048	587,493	1,346.50
"	Horrocks	"	34.5	78	2,691	590,390	1,201.04

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
Oct.	High Rock	Riverview	13.3	660	8,778	4,642,690	5,446.10
"	Stillwater	"	24.4	1,346	32,842	8,074,000	10,095.00
"	Monroe	"	9.3	397	3,692	3,449,601	3,974.97
"	East Fork	Salsich Jct	52.7	45	2,372	318,850	562.65
"	Chambers Spur	" "	13.8	2	28	16,871	20.98
"	Tanwax	" "	9.9	22	218	141,702	167.78
"	"	Harding	7.5	17	128	106,707	128.26
"	Morgans Lake	"	4.6	2	9	15,598	15.60
"	Camp 17	Mineral	8.8	570	5,016	4,030,970	4,170.69
"	Williamson	"	7.5	13	98	90,456	102.98
"	Lindberg	Elbe	18.2	31	564	219,428	312.67
"	Morton	"	20.6	12	247	72,000	109.56
"	East Fork	Midland	58.3	24	1,399	169,750	303.60
"	Camp 17	"	48.7	19	925	128,371	221.02
"	Tanwax Jct	"	15.5	151	2,341	1,016,372	1,438.18
"	Chambers Spur	"	19.4	8	155	57,023	81.28
"	Morgans Lake	"	14.0	78	1,092	533,998	686.48
Nov.	Cedar Falls	Selleck	6.3	252	1,588	2,016,000	2,520.00
"	Bandera	"	20.3	67	1,360	469,000	1,172.50
"	"	Kent Spur	17.0	1	17	7,000	11.83
"	East Fork	Kapowsin	40.9	5	205	30,861	53.57
"	" "	"	40.9	2	82	11,585	21.78
"	Lindberg	"	42.4	14	594	254,194	142.76
"	"	"	42.4	16	678	100,571	172.55
"	"	"	42.4	3	127	18,357	32.12
"	Morgans Lake	"	1.4	1	1	6,768	7.21
"	Mineral	"	30.7	3	92	18,000	29.25
"	Fredrickson	"	11.8	4	46	24,000	30.00
"	"	"	11.8	13	153	78,494	103.12

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Nov.	Tanwax	Kapowsin	3.3	38	125	238,123	237.12
"	"	"	3.3	58	191	370,405	394.57

Nov.	Camp 17	"	31.3	13	407	75,678	129.02	
"	"	"	31.3	15	470	88,438	155.69	
"	"	Tacoma	54.3	5	272	27,410	64.46	
"	"	"	54.3	3	163	14,610	37.17	
"	Gregory Spur	Kapowsin	40.2	3	121	20,222	43.49	
"	Camp 16	"	31.7	12	380	80,316	130.51	
"	"	"	31.7	13	412	95,036	164.81	
"	"	Tacoma	54.7	3	164	19,990	43.80	
"	"	"	54.7	2	109	12,220	26.76	
"	Morgans Lake	"	21.6	9	194	53,880	74.27	
"	" "	"	21.6	18	389	105,540	152.86	
"	Tanwax	"	22.5	145	3,263	782,714	1,085.34	
"	"	"	22.5	171	3,848	860,555	1,273.95	
"	Independence	Preachers Slough	33.2	360	11,952	3,049,230	4,823.92	
"	Saginaw	McKenna	51.4	30	1,542	248,760	561.20	
"	East Fork	"	68.5	4	274	21,214	56.65	
"	" "	Tacoma	63.9	103	6,582	762,780	1,590.69	
"	" "	"	63.9	152	9,713	1,138,050	2,380.75	
"	Cedarville	Hoquiam	35.2	307	10,806	2,659,300	3,692.01	
"	Chehalis	Gregory Spur	26.0	32	832	252,605	742.66	
"	McKenna	Tacoma	27.0	8	216	43,850	90.64	
"	"	"	27.0	6	162	34,980	73.02	
"	Doris	Sunset Dump	17.4	227	3,950	1,551,247	2,427.60	
"	Sutico	" "	9.9	349	3,455	2,793,360	3,673.32	
"	Burt	" "	15.9	199	3,164	1,364,903	1,965.45	
"	Horrocks Spur	Duval	6.8	15	88	83,000	110.38	
"	Rockdale	Everett	73.8	68	5,018	540,600	803.36	
"	Keechelus	"	84.7	5	424	33,730	85.40	
"	Camp 12	"	51.9	36	1,868	291,720	639.51	
"	Horrocks	"	34.5	61	2,105	448,680	236.39	
"	High Rock	Riverview	13.3	300	3,990	2,176,220	2,362.28	
"	Stillwater	"	24.4	1,263	30,817	7,542,000	9,427.00	
"	Monroe	"	9.3	295	2,744	2,478,840	2,704.11	
"	East Fork	Salsich Jct	52.7	42	2,213	270,250	480.95	
"	Camp 17	" "	43.1	12	517	89,738	157.03	
"	Harding	" "	3.8	25	95	153,926	160.08	
"	Tanwax Jct	" "	9.9	49	485	307,089	357.84	

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
Nov.	Tanwax Jct	Harding	7.5	4	30	26,122	30.22
"	Lindberg	Mineral	11.7	10	117	61,362	72.24
"	Camp 16	"	1.0	248	248	1,855,716	1,904.45
"	Camp 17	"	8.8	207	1,822	1,468,624	1,534.62
"	East Fork	"	10.2	1	10	7,160	8.52
"	Williamson	"	7.5	14	105	112,657	131.23
"	Lindberg	Elbe	18.2	4	73	27,277	39.28
"	Camp 16	Midland	49.1	17	835	136,954	243.61
"	Camp 17	"	48.7	121	5,893	846,587	1,215.71
"	Tanwax Jct	"	15.5	73	1,132	463,148	646.11
"	Chambers Spur	"	19.4	34	660	221,722	281.81
"	Morgans Lake	"	14.0	5	70	41,928	54.10
Dec.	Cedar Falls	Selleck	6.3	209	1,317	1,672,000	2,070.20
"	East Fork	Kapowsin	40.7	3	122	21,974	37.14
"	" "	"	40.7	2	81	13,504	23.63
"	Ashford	"	32.1	1	32	7,153	12.09
"	Tanwax	"	3.3	35	116	212,380	212.39
"	"	"	3.3	51	168	369,162	393.15
"	Camp 17	"	31.3	8	250	45,059	81.11
"	"	"	31.3	8	250	53,922	92.55
"	"	Tacoma	54.3	9	489	46,590	112.32
"	"	"	54.3	10	543	58,030	132.74
"	Chambers Spur	"	25.0	2	50	13,600	25.50
"	" "	"	25.0	4	100	27,250	55.10
"	Gregory Spur	"	39.6	5	198	37,750	71.69
"	" "	"	39.6	4	158	28,870	56.86

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Dec.	Camp 16	Kapowsin	31.7	2	63	11,966	20.06
"	"	"	31.7	3	95	20,506	34.66
"	"	Tacoma	54.7	1	55	5,730	12.75
"	"	"	54.7	1	55	7,800	17.08
"	Tanwax	"	22.5	11	248	55,790	79.59

"	"	"	22.5	19	428	99,639	143.15
"	Independence	Preachers Slough	33.2	226	7,503	1,868,190	3,016.27
"	East Fork	Tacoma	63.9	87	5,559	553,460	1,256.78
"	" "	"	63.9	95	6,071	633,350	1,413.41
"	Cedarville	Hoquiam	35.2	170	5,984	1,382,895	1,921.11
"	Chehalis	Gregory Spur	26.0	8	208	61,723	140.94
"	McKenna	Tacoma	27.0	18	486	94,200	206.67
"	"	"	27.0	16	432	88,120	189.36
"	Doris	Sunset Dump	17.4	80	1,392	899,905	1,408.30
"	Sutico	" "	9.9	148	1,465	1,154,520	1,518.16
"	Burt	" "	15.9	79	1,256	910,421	1,310.97
"	Horrocks Spur	Duval	6.8	33	224	231,000	298.48
"	Monroe	Everett	14.1	9	127	61,550	109.32
"	Rockdale	"	73.8	45	3,321	337,950	868.84
"	Camp 12	"	51.9	59	3,062	415,779	957.59
"	Horrocks	"	34.5	41	1,415	306,870	598.65
"	High Rock	Riverview	13.3	143	1,902	998,588	1,188.41
"	Stillwater	"	24.4	929	22,668	5,544,000	6,830.00
"	Monroe	"	9.3	373	3,469	3,176,420	3,582.40
"	East Fork	Salsich Jct	52.7	2	105	12,510	21.89
"	Camp 17	" "	43.1	6	259	44,002	78.55
"	Camp 16	Mineral	1.0	63	63	466,736	491.22
"	Camp 17	"	8.8	93	818	1,730,978	628.58
"	Williamson	"	7.5	12	90	96,113	113.31
"	Lindberg	Elbe	18.2	2	36	10,864	16.89
"	Camp 16	Midland	49.1	70	3,437	517,377	927.30
"	Camp 17	"	48.7	30	1,461	198,056	373.09
"	Tanwax Jct	"	15.5	3	47	18,436	25.36
"	Chambers Spur	"	19.4	21	407	137,063	191.60
"	Morgans Lake	"	14.0	8	112	68,806	75.66
	Total 1919		....	54,125	1,234,639	390,191,366	549,806.13
1920							
Jan.	Cedar Falls	Selleck	6.3	243	1,531	1,944,000	2,432.50
"	Ashford	Kapowsin	32.1	1	32	7,195	12.16
"	Tanwax	"	3.3	72	237	444,546	432.53
"	"	"	3.3	143	471	911,112	970.35

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
Jan.	Camp 17	"	31.3	11	344	68,410	111.17
"	"	"	31.3	23	720	146,446	261.78
"	"	Tacoma	54.3	9	489	35,640	132.54
"	"	"	54.3	21	1,140	158,790	315.74
"	Chambers Spur	"	25.0	4	100	23,330	45.28
"	" "	"	25.0	10	250	60,140	118.69
"	Gregory Spur	"	39.6	2	79	14,500	22.13
"	" "	"	39.6	8	317	58,400	116.92
"	Camp 16	Kapowsin	31.7	4	127	24,284	41.22
"	"	"	31.7	11	349	63,784	113.46
"	"	Tacoma	54.7	45	2,462	291,770	623.71
"	"	"	54.7	70	3,829	476,140	1,032.71
"	Midland	"	5.6	1	6	10,840	13.65
"	Chehalis	"	65.4	30	1,962	269,060	571.75
"	"	"	65.4	32	2,093	367,270	841.34
"	Lindberg	McKenna	70.0	25	1,750	179,550	329.33
"	East Fork	Tacoma	63.9	115	7,349	717,440	1,602.16
"	" "	"	63.9	194	12,397	1,191,299	2,772.53
"	Independence	Preachers Slough	33.2	11	365	77,000*	120.56
"	Cedarville	Hoquiam	35.2	336	11,827	2,701,283	3,801.85
"	Chehalis	Gregory Spur	26.0	13	338	96,500	214.15
"	McKenna	Tacoma	27.0	7	189	36,670	79.50
"	"	"	27.0	14	478	70,010	163.33
[fol. 318-13]							
Jan.	Doris	Sunset Dump	17.4	231	4,019	1,708,906	2,674.40
"	Sutico	" "	9.9	440	4,356	3,538,360	4,652.99
"	Burt	" "	15.9	186	2,957	1,346,562	1,938.96
"	Horrocks Spur	Duval	6.8	15	102	105,000	120.61
"	" "	Everett	34.5	26	897	172,102	362.39
"	Monroe	Riverview	9.3	12	111	100,960	113.58
"	Mineral	Frderickson	43.2	9	388	33,448	101.95
"	Chambers Spur	Salsich Jct	13.8	25	345	158,715	199.09

"	"	Camp 16	"	"	43.5	34	1,479	220,897	380.35
"	"	Camp 17	"	"	43.1	36	1,551	271,271	469.90
"	"	Camp 16	Mineral		1.0	16	16	103,483	106.05
"	"	Camp 17	"		8.8	34	299	233,428	240.01
"	"	East Fork	"		10.2	1	10	6,000	6.75
"	"	Williamson	"		7.5	27	202	199,650	233.34
"	"	Camp 17	Elbe		7.1	15	106	78,532	108.28
"	"	Camp 16	"		7.5	2	15	12,216	16.12
"	"	Morton	"		20.6	5	103	25,660	46.95
"	"	Camp 16	Midland		49.1	76	3,731	516,405	892.47
"	"	Camp 17	"		48.7	188	9,155	1,417,689	2,448.54
"	"	Morton	"		62.2	8	497	68,666	124.63
Feb.		Cedar Falls	Selleck		6.3	235	1,481	1,880,000	2,350.00
"		East Fork	Kapowsin		40.9	3	123	22,102	38.68
"		Lindberg	Kapowsin		42.4	1	42	5,190	10.14
"		"	"		42.4	1	42	7,131	12.48
"		"	McKenna		70.0	10	700	59,452	125.67
"		"	Tacoma		65.4	2	131	18,430	47.28
"		Haskins	Kapowsin		16.2	2	32	13,000	28.00
"		Elbe	"		24.2	1	24	6,000	9.00
"		Tanwax	"		3.3	73	240	455,140	455.14
"		"	"		3.3	159	524	989,885	1,054.37
"		Camp 17	"		31.3	12	376	24,692	132.03
"		"	"		31.3	13	407	77,864	156.70
"		"	Tacoma		54.3	9	489	74,030	148.42
"		"	"		54.3	7	380	52,440	97.99
"		Morton	"		67.8	6	407	42,761	106.89
"		"	"		67.8	1	68	6,803	17.45
"		Chambers Spur	"		25.0	1	25	6,240	11.70
"		" "	"		25.0	3	75	21,520	41.75
"		Gregory Spur	"		39.6	7	277	48,570	94.80
"		" "	"		39.6	8	317	56,730	113.13
"		Camp 16	Kapowsin		31.7	3	95	19,379	32.30
"		"	"		31.7	1	32	7,122	12.04
"		"	Tacoma		54.7	8	438	51,650	110.32
"		"	"		54.7	15	821	98,909	219.25
"		Chehalis	"		65.4	14	916	108,170	229.86

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
Feb.	Chehalis	Tacoma	65.4	37	2,420	290,940	637.20
"	East Fork	"	63.9	169	10,799	1,107,840	2,336.35
"	" "	"	63.9	318	20,320	2,115,097	4,672.65
"	Independence	Preachers Slough	33.2	178	5,910	1,644,367	2,567.91
"	Cedarville	Hoquiam	35.2	479	16,860	3,648,970	4,853.72
"	Chehalis	Gregory Spur	26.0	10	260	85,472	165.06
"	McKenna	Tacoma	27.0	11	297	72,701	136.41
"	"	"	27.0	11	297	66,950	129.69
"	Doris	Sunset Dump	17.4	221	3,845	2,006,503	3,140.15
"	Sutico	" "	9.9	733	7,257	5,798,720	7,625.42
"	Burt	" "	15.9	244	3,880	1,929,753	2,778.51
"	Horrocks Spur	Duval	6.8	4	27	28,000	36.38
"	Stillwater	"	5.4	11	59	58,000	86.79
"	McKenna	Gregory Spur	12.6	22	277	154,000	235.11
"	Horrocks	Everett	34.5	25	862	162,190	346.15
"	Camp 12	"	51.9	183	9,497	1,244,878	2,978.37
"	High Rock	Riverview	13.3	331	4,402	2,324,800	2,681.98
"	Monroe	"	9.3	551	5,124	4,646,144	5,226.36
"	Stillwater	"	24.4	1,085	26,474	6,524,000	8,137.50
[fol. 318-14]							
Feb.	Chambers Spur	Salsich Jct	13.8	3	41	19,134	23.92
"	Camp 16	" "	43.5	26	1,131	175,522	304.30
"	Camp 17	" "	43.1	12	517	77,025	140.74
"	Camp 16	Mineral	1.0	194	194	1,248,619	1,397.78
"	Camp 17	Mineral	8.8	108	50	686,082	728.74
"	East Fork	"	10.2	2	20	12,000	14.28
"	Williamson	"	7.5	93	697	617,968	747.17
"	"	Elbe	1.0	13	13	86,020	91.97
"	Camp 17	"	7.1	19	134	155,626	155.64
"	Carlson	"	8.3	10	83	65,770	77.77
"	Camp 16	Midland	49.1	69	3,387	472,654	821.79
"	Camp 17	"	48.7	190	9,253	1,300,661	2,445.79

"	Chambers Spur	"	19.4	15	291	96,755	137.26
"	Morgan Lake	"	14.0	6	84	39,386	49.65
"	Morton	"	62.2	9	559	83,461	150.57
"	"	Elbe	20.6	9	185	52,366	85.38
March	Cedar Falls	Selleck	6.3	362	2,281	2,896,000	3,620.00
"	Lindberg	McKenna	70.0	23	1,610	167,477	401.68
"	Elbe	Kapowsin	24.2	2	48	12,000	18.00
"	Harding	Tacoma	15.0	2	30	9,580	22.05
"	"	"	15.0	7	105	37,960	49.13
"	Tanwax	Kapowsin	3.3	83	273	524,410	529.81
"	"	"	3.3	177	584	1,122,823	1,249.46
"	Camp 17	Tacoma	54.3	36	1,955	209,190	450.60
"	"	"	54.3	66	3,584	352,820	845.25
"	Fredrickson	"	11.2	3	34	14,130	22.39
"	"	"	11.2	9	101	38,550	66.72
"	Morton	"	67.8	1	68	7,300	18.25
"	"	"	67.8	1	68	6,299	16.16
"	Chambers Spur	"	25.0	4	100	20,660	45.11
"	" "	"	25.0	9	225	50,390	105.69
"	Gregory Spur	"	39.6	17	673	118,389	221.05
"	" "	"	39.6	17	673	117,752	266.94
"	Camp 16	"	54.7	3	164	18,290	38.93
"	"	"	54.7	5	274	31,830	69.71
"	Chehalis	"	65.4	2	131	18,220	40.08
"	"	"	65.4	1	65	9,900	47.80
"	East Fork	"	63.9	155	9,904	944,950	2,143.83
"	" "	"	63.9	243	15,528	1,607,310	3,668.45
"	Independence	Preachers Slough	33.2	611	20,205	5,800,793	8,873.39
"	Cedarville	Hoquiam	35.2	377	13,270	3,061,957	4,314.27
"	McKenna	Gregory Spur	12.6	26	328	186,555	301.69
"	"	Tacoma	27.0	18	486	127,360	205.03
"	"	"	27.0	25	675	175,000	394.85
"	Doris	Sunset Dump	17.4	250	4,350	2,177,978	3,408.55
"	Sutico	" "	9.9	900	8,910	7,017,790	9,228.40
"	Burt	" "	15.9	144	2,290	1,111,708	1,600.80
"	High Rock	Duval	5.7	8	46	50,710	66.58
"	Stillwater	"	5.4	20	108	126,000	165.69

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
March	Chehalis	Gregory Spur	26.0	3	78	22,316	41.84
"	Horrocks	Everett	34.5	66	2,277	502,590	980.27
"	Camp 12	"	51.9	173	8,978	1,253,000	2,743.15
"	High Rock	Riverview	13.3	362	4,814	1,588,108	2,982.78
"	Monroe	"	9.3	400	3,720	2,820,281	3,202.60
"	Stillwater	"	24.4	1,031	25,156	6,285,290	7,899.11
"	Harding	Salsich Jct	3.8	3	11	18,000	18.39
"	Camp 16	Mineral	10.4	148	1,539	979,395	1,026.28
"	Camp 17	"	8.8	153	1,346	994,242	1,033.42
"	Williamson	"	7.5	60	450	418,191	486.73
"	"	Elbe	1.0	17	17	114,525	127.16
[fol. 518-15]							
March	Camp 17	Elbe	7.1	2	14	14,586	15.53
"	Morton	"	20.6	9	185	44,425	84.39
"	Camp 16	Midland	49.1	46	2,258	318,431	551.02
"	Camp 17	"	48.7	182	8,863	1,200,988	2,075.21
"	Haskins	"	10.0	8	80	48,322	56.70
April	Cedar Falls	Selleck	6.3	200	1,260	1,600,000	2,010.50
"	Lindberg	McKenna	70.0	10	700	65,987	117.27
"	Reliance	Kapowsin	20.3	24	487	163,439	224.71
"	"	"	20.3	33	670	213,993	308.28
"	Tanwax	"	3.3	83	273	52,505	555.87
"	"	"	3.3	134	442	849,043	904.64
"	Camp 17	"	31.3	4	125	24,738	33.07
"	"	Tacoma	54.3	40	2,172	246,520	436.42
"	"	"	54.3	45	2,444	255,040	615.43
"	Morton	"	67.8	4	271	24,608	66.12
"	"	"	67.8	4	271	18,586	61.57
"	Gregory Spur	"	39.6	8	317	60,710	106.83
"	" "	"	39.6	16	634	109,120	225.65
"	National	"	53.1	1	53	7,470	16.81
"	"	"	53.1	1	53	7,060	16.34

April	Reliance	"	43.3	28	1,212	152,970	352.39
"	"	"	43.3	42	1,819	251,220	512.52
"	Walkers Spur	"	45.2	8	362	43,750	97.94
"	" "	"	45.2	14	633	74,810	177.88
"	East Fork	"	63.9	81	5,176	530,080	1,146.36
"	" "	"	63.9	148	9,457	992,709	2,286.45
"	Independence	Preachers Slough	33.2	499	16,567	4,710,490*	7,340.02
"	Cedarville	Hoquiam	35.2	351	12,355	2,841,609	3,953.68
"	McKenna	Gregory Spur	12.6	57	718	402,893	647.26
"	Bedford	Sunset Dump	15.2	234	3,557	1,690,711	2,444.69
"	Doris	" "	17.4	305	5,307	2,576,404	4,032.05
"	Sutico	" "	9.9	809	8,009	6,268,570	8,243.20
"	Burt	" "	15.9	218	3,466	1,626,828	2,342.49
"	Horrocks Spur	Duval	6.8	2	14	14,000	19.50
"	High Rock	"	5.4	30	162	217,600	287.06
"	Horrocks	Everett	34.5	74	2,553	572,810	1,119.50
"	Tanner	"	49.1	7	343	49,000	102.06
"	Camp 12	"	51.9	120	6,228	840,700	1,839.60
"	High Rock	Riverview	13.3	411	5,466	2,899,580	3,469.15
"	Monroe	Riverview	9.3	444	4,129	3,270,463	3,919.03
"	Stillwater	"	24.4	989	24,131	5,966,320	7,495.40
"	Kinsman	Fredrickson	1.5	92	138	552,000	575.10
"	East Fork	Salsich Jct	52.7	4	210	24,000	42.78
"	Lindberg	Mineral	11.7	13	152	83,234	100.38
"	Reliance	"	10.4	202	2,100	1,274,933	1,628.67
"	Camp 17	"	8.8	174	1,531	1,201,195	1,206.10
"	Williamson	"	7.5	24	180	158,304	201.75
"	"	Elbe	1.0	9	9	59,163	63.65
"	National	"	5.9	20	118	156,536	187.72
"	Carlson	"	8.3	2	16	10,071	13.50
"	Morton	"	20.6	4	82	17,099	36.78
"	Camp 17	Midland	48.7	125	6,087	858,306	1,511.23
"	Chambers Spur	"	19.4	48	931	305,847	432.07
"	Morgans Lake	"	14.0	4	56	24,000	30.78
"	Reliance	"	37.7	64	2,412	419,045	700.73
"	Morton	"	62.2	9	559	75,718	135.72
"	Alder	Mineral	12.5	1	12	7,260	9.08

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
May	Cedar Falls	Selleck	6.3	322	2,029	2,576,000	3,220.20
"	Garcia	Selleck	15.0	108	1,620	1,043,070	1,661.86
"	Lindberg	Kapowsin	42.4	1	42	5,430	10.14
"	"	"	42.4	3	127	17,532	33.01
"	"	McKenna	70.0	31	2,170	229,696	402.51
"	"	Tacoma	65.4	1	65	5,330	15.00
"	"	"	65.4	3	196	16,830	48.58
[fol. 518-16]							
May	Haskins	Kapowsin	16.2	1	16	5,654	8.64
"	Kinsman	"	13.3	1	13	6,000	7.50
"	"	"	13.3	3	40	16,069	23.67
"	Alder	"	18.2	7	127	42,086	55.87
"	"	"	18.2	30	546	181,774	261.76
"	Reliance	"	20.3	5	102	39,189	53.88
"	"	"	20.3	12	244	66,750	96.12
"	Tanwax	"	3.3	58	125	352,311	358.90
"	"	"	3.3	94	310	598,890	637.53
"	Camp 17	"	31.3	1	31	6,000	10.14
"	"	Tacoma	54.3	84	4,561	462,250	1,000.38
"	"	"	54.3	129	7,005	711,240	1,598.56
"	Williamson	"	46.2	10	462	59,060	124.54
"	"	"	46.2	23	1,063	137,967	299.22
"	Morton	"	67.8	2	136	11,641	30.00
"	"	"	67.8	8	542	44,182	123.66
"	Gregory Spur	"	39.6	12	475	76,260	162.30
"	" "	"	39.6	7	277	46,550	98.08
"	National	"	53.1	19	1,009	119,410	251.40
"	"	"	53.1	25	1,328	156,473	339.30
"	Reliance	"	40.3	47	1,894	246,139	487.82
"	"	"	40.3	57	2,297	332,280	735.01
"	Walkers Spur	"	45.2	60	2,712	334,710	743.00
"	" "	"	45.2	89	4,023	490,410	1,113.84

"	Balch	"	65.8	6	395	52,199	120.83
"	East Fork	"	63.9	105	6,710	702,420	1,515.59
"	" "	"	63.9	134	8,563	1,023,040	2,236.69
"	McKenna	Gregory Spur	12.6	46	580	326,049	507.30
"	Independence	Preachers Slough	33.2	611	20,285	5,430,680	8,503.49
"	Cedarville	Hoquiam	35.2	454	15,980	3,683,447	5,236.85
"	Firedale	Sunset Dump	8.2	52	426	288,127	299.95
"	Bedford	" "	15.2	186	2,827	1,514,620	2,181.00
"	Doris	" "	17.4	254	4,420	2,120,674	3,318.90
"	Sutico	" "	9.9	783	7,752	3,255,340	4,412.21
"	Burt	" "	15.9	178	2,830	1,388,527	1,998.97
"	High Rock	Duval	5.4	11	59	73,010	97.12
"	Horrocks	Everett	34.5	79	2,725	612,671	1,178.84
"	Camp 12	"	51.9	133	6,902	931,000	2,038.09
"	High Rock	Riverview	13.3	622	8,272	4,400,738	5,212.84
"	Monroe	"	9.3	517	4,808	3,890,930	4,575.07
"	Stillwater	"	24.4	1,123	27,401	6,791,790	8,489.74
"	Kinsman	Fredrickson	1.5	138	207	836,000	879.93
"	Lindberg	Mineral	11.7	17	198	125,520	144.43
"	Alder	"	12.5	23	287	142,890	193.94
"	Reliance	"	10.4	333	3,463	2,673,160	3,313.15
"	Camp 17	"	8.8	212	1,865	1,785,940	1,637.48
"	East Fork	"	10.2	1	10	9,000	11.84
"	Williamson	"	7.5	16	120	101,130	117.98
"	National	Elbe	5.9	8	47	52,180	63.13
"	Horns Spur	"	14.5	22	319	121,720	190.12
"	Camp 17	Midland	48.7	48	2,337	336,549	580.35
"	Chambers Spur	"	19.4	37	717	202,170	323.61
"	Haskins	"	10.0	7	70	42,000	48.81
"	Reliance	"	37.7	191	7,200	1,195,497	2,000.57
"	Alder	"	35.6	16	569	100,167	167.23
"	Walkers Spur	"	39.6	8	316	49,875	83.37
"	Morton	"	62.2	3	186	26,382	47.88
"	Tanner	Everett	49.1	2	98	14,000	28.92
June	Cedar Falls	Selleck	6.3	278	1,751	2,224,000	2,780.00
"	Garcia	"	15.0	176	2,640	1,702,113	2,716.53
"	Lindberg	Kapowsin	42.4	4	1,696	25,286	43.64

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
June	Lindberg	Kapowsin	42.4	6	254	36,599	64.05
"	"	McKenna	70.0	22	1,540	137,703	266.09
"	Haskins	Kapowsin	16.2	1	16	6,000	7.89
"	Kinsman	"	13.3	2	27	12,000	15.39
"	"	"	13.3	9	120	54,636	79.30
[fol. 318-17]							
1920							
June	Alder	Kapowsin	18.2	9	164	54,000	74.25
"	"	"	18.2	6	109	36,506	52.96
"	Reliance	"	20.3	7	142	42,000	58.50
"	"	"	20.3	9	183	48,242	79.55
"	Tanwax	"	3.3	122	402	753,802	754.00
"	"	"	3.3	142	468	876,855	936.99
"	Camp 17	Tacoma	54.3	118	6,407	640,399	1,460.52
"	"	"	54.3	166	9,014	906,767	2,108.28
"	Alder	"	41.2	6	247	29,730	75.91
"	"	"	41.2	10	412	46,330	118.26
"	Williamson	"	46.2	29	1,340	94,150	209.74
"	"	"	46.2	18	832	175,600	417.58
"	Morton	"	67.8	1	68	5,824	15.00
"	"	"	67.8	4	271	24,888	66.03
"	Chambers Spur	"	25.0	2	50	7,760	22.50
"	" "	"	25.0	2	50	9,880	23.28
"	Gregory Spur	"	39.6	2	79	14,420	28.50
"	Reliance	"	43.2	53	2,290	315,290	638.64
"	"	"	43.2	76	3,283	443,991	927.26
"	Walkers Spur	"	45.2	83	3,752	415,250	1,014.86
"	" "	"	45.2	91	4,113	496,870	1,184.81
"	Balch	"	65.8	1	66	7,955	18.42
"	East Fork	"	63.9	84	5,368	492,140	1,192.63
"	" "	"	63.9	124	7,924	841,730	1,934.25
"	McKenna	Gregory Spur	12.6	5	63	35,000	55.21

"	Independence	Preachers Slough	33.2	579	19,223	5,002,779*	7,726.60
"	Cedarville	Hoquiam	35.2	567	19,958	4,647,326	6,590.85
"	Nulty Spur	"	55.3	29	1,604	226,006	512.58
"	Roseland	Tacoma	14.6	1	15	7,300	13.69
"	McKenna	Tacoma	27.0	9	243	49,450	101.91
"	"	"	27.0	26	702	146,330	318.05
"	Firedale	Sunset Dump	8.2	99	812	687,999	904.70
"	Bedford	" "	15.2	211	3,207	1,684,474	2,425.68
"	Doris	" "	17.4	248	4,315	2,132,290	3,337.05
"	Sutico	" "	9.9	485	4,801	3,945,090	5,187.80
"	Burt	" "	15.9	217	3,450	1,830,349	2,635.60
"	High Rock	Duval	5.4	28	151	186,550	242.83
"	Horrocks	Everett	34.5	68	2,346	503,450	982.98
"	Camp 12	"	51.9	122	6,331	900,619	1,979.74
"	High Rock	Riverview	13.3	457	6,078	3,192,482	3,939.99
"	Monroe	Riverview	9.3	428	3,980	3,337,950	3,888.35
"	Stillwater	"	24.4	1,218	29,719	7,377,100	9,281.38
"	Kinsman	Fredrickson	1.5	141	211	846,000	863.64
"	Reliance	Harding	28.3	12	339	83,246	134.08
"	Lindberg	Mineral	11.7	8	93	53,541	68.41
"	Reliance	"	10.4	241	2,506	1,591,756	1,852.30
"	Camp 17	"	8.8	201	1,768	1,521,063	1,582.21
"	Alder	Elbe	6.0	8	48	41,410	51.00
"	Horns Spur	"	14.5	22	319	142,473	207.08
"	Morton	"	20.6	9	185	77,302	120.44
"	East Fork	"	16.7	8	133	55,913	83.31
"	Camp 17	Midland	48.7	18	876	137,970	237.55
"	Chambers Spur	"	19.4	39	756	257,310	353.83
"	Reliance	"	37.7	153	5,768	1,017,960	1,589.96
"	Alder	"	35.6	21	747	130,371	215.82
"	Walkers Spur	"	39.6	14	554	110,564	184.98
"	Morton	"	62.2	10	622	82,403	148.53
July	Keechelus	Ellensburg	52.1	8	417	52,090	118.54
"	Easton	"	36.8	10	368	67,740	139.16
"	Cedar Falls	Selleck	6.3	257	1,619	2,056,000	2,510.90
"	Lindberg	McKenna	70.0	1	70	7,437	13.01
"	Harding	Kapowsin	8.0	1	8	6,000	6.75

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
July	Harding	Kapowsin	8.0	1	8	6,000	7.14
"	Fredrickson	"	11.8	29	342	175,885	208.89
"	"	"	11.8	41	484	249,237	297.05
"	Tanwax	"	3.3	58	191	359,823	359.86
"	"	"	3.3	77	254	489,843	533.76
"	Camp 17	Tacoma	54.3	99	5,376	533,100	1,291.98
"	"	"	54.3	137	7,439	815,370	1,979.38
[fol. 318-18]							
1920							
July	Alder	Tacoma	41.2	2	82	10,200	25.50
"	"	"	41.2	2	82	9,280	26.28
"	Williamson	"	46.2	13	601	67,090	158.84
"	"	"	46.2	14	647	74,030	177.61
"	Morton	"	67.8	1	68	6,690	17.16
"	Chambers Spur	"	25.0	3	75	12,660	22.50
"	" "	"	25.0	1	25	4,660	22.89
"	Gregory Spur	Kapowsin	40.2	5	201	39,946	79.89
"	Reliance	Tacoma	43.3	71	3,074	37,840	835.71
"	"	"	43.3	90	3,897	501,840	1,095.31
"	Walkers Spur	"	45.2	83	3,752	411,210	1,023.06
"	" "	"	45.2	120	5,424	636,410	1,495.71
"	Balch	"	65.8	2	132	12,800	32.40
"	East Fork	"	63.9	19	1,214	127,240	270.67
"	" "	"	63.9	30	1,917	206,040	451.18
"	Independence	Preachers Slough	33.2	316	10,458	2,913,907*	4,560.82
"	Nulty Spur	Hoquiam	55.3	6	332	42,500	95.61
"	Cedarville	"	35.2	411	14,467	3,318,189	4,687.98
"	McKenna	Tacoma	27.0	12	324	60,681	133.60
"	"	"	27.0	21	567	111,690	245.56
"	Firedale	Sunset Dump	8.2	64	525	332,959	437.85
"	Bedford	" "	15.2	177	2,690	1,265,529	1,822.30
"	Doris	" "	17.4	171	2,975	1,187,970	1,859.20

"	Sutico	"	"	9.9	447	4,425	7,569,740	9,954.15
"	Burt	"	"	15.9	162	2,576	1,310,160	1,886.49
"	Horrocks	Everett		34.5	22	759	168,434	332.10
"	Monroe	Riverview		9.3	164	1,525	1,407,350	1,583.77
"	Stillwater	"		24.4	276	6,734	1,666,000	2,081.25
"	Kinsman	Fredrickson		1.5	105	157	634,958	658.83
"	Lindberg	Mineral		11.7	2	23	12,538	17.45
"	Reliance	"		10.4	232	2,412	1,598,722	1,787.64
"	Camp 17	"		8.8	120	1,056	791,559	925.33
"	East Fork	"		10.2	20	204	122,593	141.93
"	Alder	Elbe		6.0	7	42	36,330	43.17
"	Horns Spur	"		14.5	15	217	89,702	133.48
"	Chambers Spur	Midland		19.4	21	407	128,400	181.68
"	Reliance	"		37.7	137	5,164	903,818	1,439.64
"	Alder	"		35.6	67	2,385	433,285	739.49
"	Walkers Spur	"		39.6	26	1,029	185,669	308.46
"	Camp 12	Everett		15.9	91	4,722	771,090	1,595.87
Aug.	Keechelus	Ellensburg		52.1	62	3,230	425,845	1,151.71
"	"	"		52.1	11	573	79,583	212.68
"	Cedar Falls	Selleck		6.3	323	2,036	2,584,000	3,230.50
"	Lindberg	McKenna		70.0	22	1,540	155,843	285.41
"	Gregory Spur	Kapowsin		40.2	3	121	22,891	45.76
"	Kinsman	Kapowsin		13.3	5	67	30,000	37.50
"	"	"		13.3	9	120	54,000	71.01
"	Tanwax	"		3.3	73	240	450,401	444.50
"	"	"		3.3	13	42	85,472	106.85
"	"	"		3.3	122	403	749,893	798.75
"	"	"		3.3	11	36	72,876	96.92
"	Camp 17	Tacoma		54.3	83	4,507	444,700	1,013.90
"	"	"		54.3	112	6,082	612,160	1,413.19
"	Alder	"		41.2	5	206	31,320	74.55
"	"	"		41.2	1	41	8,160	17.87
"	Williamson	"		46.2	1	46	4,620	16.89
"	"	"		46.2	4	185	22,670	68.03
"	Reliance	"		43.3	25	1,083	135,110	291.23
"	"	"		43.3	26	1,126	148,250	314.97
"	Walkers Spur	"		45.2	14	633	70,440	166.56

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
Aug.	Walkers Spur	Tacoma	45.2	16	723	80,460	202.89
"	East Fork	"	63.9	5	320	32,560	69.70
"	" "	"	63.9	5	320	30,900	88.15
"	" "	"	63.9	4	256	23,440	55.50
"	Independence	Preachers Slough	33.2	516	17,131	4,890,488*	7,970.73
"	Cedarville	Hoquiam	35.2	578	20,345	4,352,046	6,983.47
[fol. 318-19]							
1920							
August	McKenna	Tacoma	27.0	11	297	67,960	137.11
"	"	"	27.0	21	441	117,310	234.51
"	Sutico	Sunset Dump	9.9	667	6,603	5,070,700	7,002.60
"	Firdale	" "	8.2	92	754	405,020	559.28
"	McPhail	" "	13.0	40	520	359,540	543.55
"	Bedford	" "	15.2	222	3,374	1,710,366	2,585.95
"	Burt	" "	15.9	10	159	145,464	256.23
"	Doris	" "	17.4	133	2,314	1,342,349	3,778.49
"	Horrocks	Everett	34.5	22	759	154,870	304.65
"	High Rock	Riverview	13.3	15	199	111,620	125.88
"	Garcia	Everett	63.5	118	7,493	890,551	2,065.04
"	Tanner	"	49.1	15	736	115,920	315.82
"	Camp 12	"	51.9	141	7,317	1,228,370	2,569.22
"	Monroe	"	14.1	3	42	22,480	50.75
"	High Rock	"	17.6	5	87	38,520	50.75
"	Monroe	Riverview	9.3	12	111	91,590	103.05
"	Stillwater	"	24.4	695	16,958	4,253,720	5,387.69
"	Horrocks	"	29.6	23	680	155,920	306.72
"	Kinsman	Fredrickson	1.5	104	156	630,000	698.71
"	Morton	Mineral	14.1	3	42	23,362	29.21
"	Lindberg	"	11.7	19	222	104,391	150.88
"	Alder	"	12.5	4	50	25,053	32.10
"	National	"	7.6	8	60	57,693	69.20
"	Reliance	"	10.4	4	41	24,564	29.57

"	Camp 17	"	8.8	192	1,689	1,212,463	1,550.63
"	Williamson	Elbe	1.0	12	12	83,863	88.52
"	Horns Spur	"	14.5	22	319	119,610	184.26
"	Camp 17	Midland	48.7	90	4,383	619,795	1,073.15
"	Reliance	"	37.7	33	1,244	231,173	366.31
"	Alder	"	35.6	78	2,776	526,134	890.65
"	Walkers Spur	"	39.6	18	712	142,024	238.12
"	Morton	"	62.2	2	124	13,430	24.02
	Total January 1st to August 31st, 1920		....	45,523	1,089,328	329,358,005	485,432.56
Sept.	Keechelus	Ellensburg	52.1	80	4,168	579,499	1,517.18
"	Cedar Falls	Selleck	6.3	343	2,161	2,710,000	2,740.50
"	Lindberg	McKenna	70.0	6	420	51,135	103.13
"	Gregory	Kapowsin	40.2	6	241	36,166	91.77
"	Harding	Kapowsin	8.0	8	64	48,000	57.12
"	"	Tacoma	15.0	2	30	10,570	27.24
"	Camp 17	"	54.3	2	109	12,010	30.18
"	"	"	54.3	6	326	33,350	94.14
"	Fredrickson	"	11.2	2	22	9,450	17.20
"	Eatonville	"	32.6	13	424	62,580	142.07
"	"	"	32.6	16	521	86,450	191.47
"	Williamson	"	46.2	2	92	9,850	33.78
"	Chambers Spur	"	25.0	1	25	3,410	14.07
"	" "	"	25.0	2	50	8,490	29.10
"	Balch	"	65.8	2	132	14,089	42.92
"	Tanwax	Kapowsin	3.3	75	247	542,160	605.33
"	"	"	3.3	119	392	820,788	1,022.67
"	Independence	Preachers Slough	33.2	376	12,483	3,252,415*	6,357.57
"	Rochester	Hoquiam	46.5	9	419	51,661	167.53
"	Cedarville	"	35.2	455	16,016	3,288,771	6,017.69
"	McKenna	Tacoma	27.0	3	81	12,200	42.21
"	"	"	27.0	9	243	41,710	131.26
"	Sutico	Sunset Dump	9.9	425	4,208	3,530,000	5,896.85
"	Firdale	" "	8.2	8	66	171,232	281.60
"	MacPhail	" "	13.0	116	1,508	994,830	1,790.64
"	Bedford	" "	15.2	201	3,055	1,251,311	2,252.34

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
Sept.	Doris	Sunset Dump	17.4	198	3,445	1,332,604	2,605.23
"	Garcia	Everett	63.5	37	2,349	288,910	832.96
"	Tanner	"	49.1	79	3,878	605,850	1,635.06
"	Camp 12	"	51.9	23	1,193	201,170	561.59
[fol. 318-20]							
1920							
Sept.	Stillwater	Everett	29.2	5	146	30,000	46.95
"	Cumberland	"	68.6	10	686	87,130	259.95
"	High Rock	"	17.6	253	4,452	1,998,430	2,8[illegible].68
"	Monroe	"	14.1	58	817	486,590	687.65
"	Horrocks	"	34.5	53	1,828	380,940	911.25
"	"	Riverview	29.6	19	562	121,430	290.74
"	Stillwater	"	24.4	238	5,807	1,408,000	2,139.89
"	Kinsman	Fredrickson	1.5	143	214	821,335	1,105.25
"	Camp 17	Harding	39.3	3	117	23,066	47.53
"	Eatonville	"	17.6	3	52	18,054	32.08
"	"	Mineral	21.1	3	63	19,514	37.58
"	Morton	"	14.1	2	28	14,039	21.97
"	Lindberg	"	11.7	5	58	31,438	51.17
"	National	"	7.6	8	60	50,618	72.65
"	Camp 17	"	8.8	307	2,701	2,017,021	2,964.93
"	Williamson	"	7.5	10	75	63,786	95.57
"	"	Elbe	1.0	21	21	148,137	193.42
"	Horns Spur	"	14.5	17	246	97,715	182.64
"	Morton	"	20.6	1	20	6,000	11.25
"	Camp 17	Midland	48.7	115	5,600	833,634	1,770.31
"	Eatonville	"	28.0	8	224	49,059	98.69
"	Chambers Spur	"	19.4	47	911	292,013	532.72
"	McKenna	"	21.4	16	342	96,862	185.87
"	Alder	"	35.6	33	1,174	199,489	415.79
Oct.	Keechelus	Ellensburg	52.1	17	886	107,250	313.28
"	Cedar Falls	Selleck	6.3	201	1,266	1,608,000	2,010.86

"	Lindberg	McKenna	70.0	7	490	42,381	93.80
"	Tanwax	Kapowsin	3.3	42	138	265,247	331.56
"	"	"	3.3	78	257	490,151	650.92
"	Camp 17	Tacoma	54.3	109	5,919	698,100	1,823.80
"	"	"	54.3	111	5,027	692,070	1,935.23
"	Fredrickson	"	11.2	3	34	12,120	25.08
"	"	"	11.2	3	34	17,660	34.05
"	"	"	....	1	11	4,830	14.55
"	Cumberland	"	63.5	1	64	8,000	19.40
"	Chambers Spur	"	23.0	4	100	11,960	56.28
"	" "	"	25.0	1	25	5,680	14.55
"	Reliance	"	43.2	2	87	6,168	31.86
"	Walkers Spur	"	45.2	12	542	69,630	187.63
"	" "	"	45.2	15	678	79,730	234.59
"	East Fork	"	63.9	20	1,278	143,340	387.66
"	" "	"	63.9	16	1,150	117,140	321.10
"	Independence	Preachers Slough	33.2	552	18,325	4,892,797*	9,471.29
"	Rochester	Hoquiam	46.5	1	47	6,750	18.58
"	Cedarville	"	35.2	532	18,726	3,884,840	7,098.21
"	Sutico	Sunset Dump	9.9	565	5,594	5,911,500	9,723.41
"	Firdale	" "	8.2	83	681	308,957	508.30
"	MacPhail	" "	18.0	105	1,365	941,860	1,694.40
"	Bedford	" "	16.2	164	2,493	1,291,426	2,324.50
"	Burt	" "	15.9	207	3,291	1,539,122	2,770.40
"	Doris	" "	17.4	190	3,306	1,268,540	2,477.90
"	Horrocks Spur	Duval	6.8	5	34	25,000	57.60
"	Garcia	Everett	63.5	51	3,238	379,440	1,070.63
"	Carnation	"	32.5	6	195	42,010	101.87
"	Tanner	"	49.1	49	2,405	359,650	980.68
"	Camp 12	"	51.9	62	3,217	486,320	1,279.82
"	Cumberland	"	68.6	59	4,047	467,980	1,390.86
"	High Rock	"	17.6	312	5,491	2,465,490	3,486.14
"	Monroe	"	14.1	543	7,656	4,391,319	6,187.33
"	Horrocks	"	34.5	40	1,380	315,430	754.65
"	"	Riverview	29.6	24	710	175,800	411.82
"	Stillwater	"	24.4	1,134	27,669	6,804,000	10,648.27
"	Eatonville	Mineral	21.1	10	211	63,130	122.34

Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
Oct.	Morton	Mineral	14.1	2	28	14,436	23.25
"	Lindberg	"	11.7	11	128	63,432	107.49
"	Camp 12	"	8.0	30	240	212,660	303.39
"	Walkers Spur	"	8.5	23	195	155,220	226.77
"	Elbe	"	6.5	59	383	445,210	645.33
"	Camp 17	"	8.8	44	387	308,209	447.66
[fol. 318-21]							
1920							
Oct.	East Fork	Mineral	58.3	107	6,238	7,326,800	1,636.07
"	Camp 17	Midland	48.7	108	5,259	748,347	1,591.84
"	Eatonville	"	28.0	16	448	102,679	205.31
"	Chambers Spur	"	19.4	19	368	106,437	207.15
"	McKenna	"	21.4	52	1,112	332,797	643.79
"	Haskins	"	10.0	8	80	44,937	76.99
"	Walkers Spur	"	39.6	12	475	76,223	155.64
Nov.	Cedar Falls	Selleck	6.3	524	3,301	4,192,000	5,240.50
"	East Fork	McKenna	68.5	56	3,836	293,324	650.30
"	Gregory	Kapowsin	40.2	3	121	23,328	56.55
"	"	"	40.2	3	121	24,392	60.99
"	Camp 17	Tacoma	54.3	37	2,009	216,860	596.91
"	"	"	54.3	19	1,032	120,470	327.13
"	Chambers Spur	"	25.0	17	425	96,540	244.54
"	" "	"	25.0	7	175	36,520	102.85
"	Walkers Spur	"	45.2	138	6,238	713,660	2,045.13
"	" "	"	45.2	67	3,028	374,450	1,107.53
"	East Fork	"	63.9	86	5,495	594,790	1,598.31
"	" "	"	63.9	56	3,578	401,960	1,106.75
"	Independence	Preachers Slough	33.2	603	20,020	5,178,702	10,183.36
"	Cedarville	Hoquiam	35.2	576	20,275	4,600,063	8,135.63
"	Cumberland	Tacoma	63.5	1	64	8,052	19.53
"	McKenna	"	27.0	21	567	119,720	298.84
"	"	"	27.0	10	270	55,090	147.11

"	Moose	Sunset Dump	5.0	113	565	938,660	1,544.15
"	Sutico	" "	9.9	618	6,118	6,093,680	10,024.13
"	Firdale	" "	8.2	139	1,140	546,850	899.65
"	Bedford	" "	15.2	240	3,648	2,120,121	3,816.18
"	Burt	" "	15.9	243	3,864	2,146,933	3,864.40
"	Doris	" "	17.4	147	2,558	1,379,745	2,697.30
"	Cedar Falls	Duval	31.0	6	186	69,556	115.94
"	Horrocks Spur	"	6.8	16	109	84,000	136.82
"	" "	Everett	34.5	40	1,380	326,950	797.77
"	Camp 12	"	51.9	36	1,864	308,110	798.19
"	High Rock	"	17.6	33	580	258,980	363.86
"	Monroe	"	14.1	394	5,555	3,407,300	4,805.25
"	Stillwater	Riverview	24.4	1,166	28,450	7,498,970	11,421.89
"	Lindberg	Mineral	11.7	6	70	41,903	66.67
"	Walkers Spur	"	8.5	77	654	506,427	690.59
"	Camp 2	"	8.0	59	472	357,364	631.73
"	Camp 17	"	8.8	31	272	200,614	355.16
"	Horns Spur	"	8.0	76	608	508,485	715.38
"	East Fork	Midland	58.3	86	5,013	628,662	1,420.19
"	Camp 17	"	48.7	4	194	33,498	66.26
"	Eatonville	"	28.0	3	84	18,000	35.64
"	Chambers Spur	"	19.4	6	116	36,000	63.36
"	McKenna	"	21.4	14	299	86,961	167.12
"	Haskins	"	10.0	10	100	60,656	105.82
"	Walkers Spur	"	39.6	106	4,197	789,899	1,545.47
Dec.	Cedar Falls	Selleck	6.3	224	1,411	1,792,000	2,240.50
"	Loveland	Tacoma	14.6	2	29	10,780	24.36
"	"	"	14.6	2	29	9,980	25.38
"	Cumberland	"	63.5	4	254	28,640	69.45
"	"	"	63.5	3	191	26,780	66.95
"	Chambers Spur	"	25.0	3	75	16,520	42.21
"	" "	"	25.0	3	75	16,560	46.75
"	Walkers Spur	"	45.2	26	1,175	127,170	395.30
"	" "	"	45.2	6	271	28,130	93.50
"	East Fork	"	63.9	214	13,675	1,425,290	3,824.87
"	" "	"	63.9	84	5,368	590,750	1,631.42

[fol. 318-22] Coast Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
Dec.	Independence	Preachers Slouth	33.2	94	3,121	780,992*	1,526.85
"	Nulty Spur	Hoquiam	55.3	27	1,493	187,350	553.54
"	Moose	Sunset Dump	5.4	164	826	1,353,290	2,226.17
"	Sutico	" "	9.9	248	2,466	2,108,150	3,467.82
"	Firdale	" "	8.2	46	369	231,586	380.98
"	Bedford	" "	15.2	122	1,854	1,085,260	1,953.54
"	Burt	" "	15.9	109	1,733	1,028,958	1,852.10
"	Doris	" "	17.4	143	2,488	922,311	1,802.10
"	Camp 12	Everett	54.9	90	4,671	774,990	2,130.26
"	Stillwater	Riverview	24.4	372	9,076	2,378,330	3,722.09
"	Walkers Spur	Mineral	8.5	36	306	231,646	330.91
	Total, Sept. 1st to Dec. 31st, 1920		....	17,746	318,471	140,346,884	234,969.38
	Total, 1920		....	63,269	1,407,799	469,704,889	720,401.94
	Total, 1919 and 1920		....	117,394	2,643,554	859,896,255	1,270,208.07

[fol. 318-23] Olympic Division

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
1919							
Jan.	Twin Rivers	Port Angeles	28.	31	868	183,060	407.03
Feb.	Twin Rivers	Port Angeles	28.	511	14,308	3,488,740	6,709.43
March	"	"	28.	733	20,524	4,918,750	9,834.11
"	De Fuca Port	"	8.	8	64	38,390	105.04
April	Twin Rivers	"	28.	881	24,668	5,376,730	11,567.53
"	De Fuca Port	"	8.	17	136	107,980	223.21
May	Twin Rivers	"	28.	1,010	28,280	6,807,610	13,262.99
"	De Fuca Port	"	8.	12	96	52,650	105.04
June	Twin Rivers	"	28.	799	22,372	5,272,710	11,210.87
July	"	"	28.	601	16,828	3,924,830	7,919.44

*Minimum.

"	Hilda	Carlsborg	33.6	22	739*	154,000	356.52
Aug.	Twin Rivers	Port Angeles	28.	983	27,524	6,462,120	12,906.79
"	Hilda	Carlsborg	33.6	233	7,829*	1,631,000	3,776.24
Sept.	Twin Rivers	Port Angeles	28.	927	25,956	5,811,920	12,171.51
"	Hilda	Carlsborg	33.6	237	7,963*	1,659,000	3,541.77
Oct.	Twin Rivers	Port Angeles	28.	772	21,616	4,818,330	10,136.36
"	Hilda	Carlsborg	33.6	185	6,216*	1,295,000	2,998.85
Nov.	Twin Rivers	Port Angeles	28.	846	23,688	5,271,560	11,344.33
"	Hilda	Carlsborg	33.6	181	6,082*	1,267,000	3,688.01
Dec.	Twin Rivers	Port Angeles	28.	457	12,796	2,715,940	6,000.41
"	Hilda	Carlsborg	33.6	81	2,722*	567,000	1,316.01
"	Total, 1919		....	9,527	271,275	61,824,320	129,581.49
1920							
Jan.	Twin Rivers	Port Angeles	28.	761	21,308	4,515,880	9,991.93
"	Hilda	Carlsborg	33.6	157	5,291*	1,099,000	2,544.93
Feb.	Twin Rivers	Port Angeles	28.	994	27,832	6,155,060	13,051.22
"	Hilda	Carlsborg	33.6	183	6,149*	1,281,000	2,966.33
March	Twin Rivers	Port Angeles	28.	1,038	29,064	6,693,110	13,628.94
"	Hilda	Carlsborg	33.6	201	6,754*	1,407,000	3,258.21
April	Twin Rivers	Port Angeles	28.	1,010	28,280	6,580,040	13,261.30
"	Hilda	Carlsborg	33.6	200	6,720*	1,400,000	3,889.69
May	Twin Rivers	Port Angeles	28.	1,030	28,840	6,847,910	13,523.90
"	Hilda	Carlsborg	33.6	183	6,149*	1,281,000	2,966.43
June	Twin Rivers	Port Angeles	28.	969	27,132	6,487,840	12,722.97
July	Hilda	Carlsborg	33.6	164	5,510*	1,148,000	2,658.44
"	Twin Rivers	Port Angeles	28.	550	15,400	3,567,530	7,236.20
"	Hilda	Carlsborg	33.6	3	101*	21,000	48.63
Aug.	Twin Rivers	Port Angeles	28.	1,009	28,252	6,139,380	13,925.91
"	Hilda	Carlsborg	33.6	113	1,537*	791,000	2,250.71
"	"	Port Angeles	18.6	22	409	154,000	208.60
	Total, Jan. 1st to Aug. 31, 1920		....	8,587	244,728	55,568,750	118,134.34
Sept.	Twin Rivers	Port Angeles	28.	951	26,628	5,880,340	15,615.42
"	Hilda	"	18.6	35	651	245,000	574.70
"	"	Carlsborg	33.6	301	10,114*	2,107,000	6,101.27

Olympic Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
Oct.	Twin Rivers	Port Angeles	28.	1,077	30,156	7,066,540	17,684.34
"	Hilda	"	18.6	48	893	366,000	787.96
"	"	Carlsborg	33.6	287	9,643*	1,989,000	5,817.29
Nov.	Twin Rivers	Port Angeles	28.	1,194	33,432	7,200,180	19,605.48
"	Hilda	"	18.6	36	669	252,000	591.12
"	"	Carlsborg	33.6	212	7,123*	1,484,000	4,236.95
Dec.	Twin Rivers	Port Angeles	28.	823	23,044	4,761,650	13,513.66
"	Hilda	"	18.6	19	353	133,000	311.98
"	"	Carlsborg	33.6	139	1,890*	973,000	2,817.53
	Total, Sept. 1st to Dec. 31, 1920		....	5,122	144,596	32,457,710	87,657.70
	Total, 1920		....	13,709	389,324	88,026,460	205,792.04
	Total, 1919 and 1920		....	23,236	660,599	149,850,780	335,373.53

[fol. 318-24]

Bellingham Division

1919							
Oct.	Columbia	Lynden	18.4	21	386	127,900	246.10
"	Nickolay	Lynden	22.2	10	222	63,500	118.75
Nov.	Maple Falls	Sumas	14.1	40	564	254,370	513.47
"	" "	Bellingham	37.2	270	10,044	2,074,710	3,730.59
"	Kulshan	"	22.5	304	6,840	2,237,480	3,196.16
"	Glacier	"	44.4	44	1,954	354,490	642.82
"	Nugents	Lynden	14.3	11	157	69,920	133.92
"	Kulshan	"	23.5	5	118	32,900	62.84
Dec.	Maple Falls	Sumas	14.1	14	197	83,470	181.20
"	Glacier	Bellingham	44.4	27	1,199	202,250	391.27
"	"	Lynden	32.4	33	1,069	211,460	410.00
"	Columbia	"	18.4	20	368	131,200	258.95
"	Balfour	"	19.2	2	38	13,800	24.75
"	Nickolay	"	22.2	17	377	105,620	198.20
"	Nugents	"	14.3	22	315	134,240	449.99
"	Kulshan	"	23.5	22	517	135,900	450.76
	Total, 1919		....	7,753	202,395	55,252,387	90,484.59

1920							
Jan.	Maple Falls	Sumas	14.1	18	254	92,260	187.28
"	" "	Bellingham	37.2	56	963	375,982	757.16
"	Kulshan	"	22.5	167	3,758	1,248,660	1,848.12
"	Glacier	"	44.4	23	1,021	192,470	371.03
"	"	Maple Falls	7.2	12	86	84,000*	78.00
"	"	Lynden	32.4	4	130	31,004	55.82
"	Kulshan	"	23.6	13	306	84,300	159.33
"	Balfour	"	19.2	12	230	61,483	115.88
"	Columbia	"	18.4	10	184	52,752	102.31
Feb.	Maple Falls	Sumas	14.1	7	99	46,263	86.76
"	" "	Bellingham	37.2	47	1,748	319,270	585.95
"	Kulshan	"	22.5	131	2,948	935,420	1,373.14
"	Glacier	Maple Falls	7.2	24	173	168,000*	156.00
"	"	Lynden	32.4	2	65	9,100	17.65
"	Columbia	"	18.4	13	239	69,497	133.71
"	Balfour	"	19.2	7	134	37,159	83.84
"	Maple Falls	"	25.2	2	50	10,336	23.80
"	Kulshan	"	23.5	13	306	80,802	155.98
"	Nugents	"	14.3	11	157	65,200	126.13
March	Maple Falls	Sumas	14.1	19	268	106,719	197.13
"	" "	Bellingham	37.2	168	6,250	1,140,790	2,061.23
"	Kulshan	"	22.5	341	7,673	2,529,910	3,812.17
"	"	Lynden	23.5	11	259	70,320	135.92
"	Balfour	"	19.2	11	211	58,810	113.28
"	Columbia	"	18.4	9	166	56,380	108.89
"	Glacier	"	32.4	6	194	27,860	53.61
"	Nugents	"	14.3	8	114	48,580	93.88
April	Maple Falls	Sumas	14.1	23	324	140,750	237.98
"	" "	Bellingham	37.2	242	9,002	1,770,760	3,088.15
"	Kulshan	"	22.5	449	10,103	3,466,100	5,066.32
"	Chinn Spur	Maple Falls	.5	21	11	147,000*	105.00
"	Nugents	Lynden	14.3	8	114	56,790	109.34
"	Kulshan	"	23.5	10	235	59,340	109.26
"	Columbia	"	18.4	1	18	7,320	12.20
May	Maple Falls	Sumas	14.1	7	99	39,450	77.03

Bellingham Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
May	Maple Falls	Bellingham	37.2	267	9,932	1,845,570	3,184.74
"	Kulshan	"	22.5	478	10,755	3,596,160	5,539.89
"	Chinn Spur	Maple Falls	.5	34	17	238,000*	170.00
"	Nickolay	Lynden	22.2	2	44	14,720	28.02
"	Columbia	"	18.4	4	74	24,010	47.75
"	Nugents	"	14.3	11	157	57,308	110.50
"	Kulshan	"	23.5	3	71	18,640	36.10
[fol. 318-25]							
1920							
June	Maple Falls	Sumas	14.1	10	141	54,813	124.96
"	" "	Bellingham	37.2	222	8,528	1,566,160	2,625.29
"	Kulshan	"	22.5	509	11,452	4,151,940	6,407.13
"	Glacier	"	44.4	18	799	125,730	242.54
"	"	Maple Falls	7.2	79	569	553,000*	513.50
"	Chinn	" "	.5	20	10	140,000*	100.00
"	Deming	" "	33.0	31	1,023	190,500	368.97
"	Kulshan	Lynden	23.5	9	212	59,200	112.76
"	Nugents	"	14.3	8	114	46,200	89.50
"	Columbia	"	18.4	3	55	16,995	31.86
"	Nickolay	"	22.2	9	200	57,980	150.13
"	Balfour	"	19.2	11	211	61,300	122.70
July	Maple Falls	Sumas	14.1	15	212	83,970	169.40
"	" "	Bellingham	37.2	157	5,840	1,143,850	1,994.31
"	Kulshan	"	22.5	69	1,553	556,340	764.47
"	Glacier	"	44.4	136	6,038	974,260	1,875.68
"	"	Maple Falls	7.2	42	302	294,000*	273.00
"	Limestone Jct	" "	6.1	6	37	38,000	67.17
"	Deming	" "	33.0	5	165	33,500	64.99
"	Limestone	Lynden	19.1	8	153	46,500	90.10
"	Nugents	"	14.3	58	829	412,680	785.99
"	Glacier	"	32.4	46	1,490	322,620	648.20

Aug.	Maple Falls	Sumas	14.1	60	846	387,919	703.82
"	" "	Bellingham	37.2	182	6,770	1,210,350	2,221.22
"	Goshen	"	10.8	47	508	353,335	711.99
"	Kulshan	"	22.5	43	968	329,820	486.98
"	Deming	"	17.4	20	344	150,480	331.40
"	Glacier	"	44.4	334	14,830	2,646,250	5,277.31
"	"	Maple Falls	7.2	62	446	434,000*	403.00
"	Deming	" "	33.0	14	462	89,000	172.66
"	Nugents	Lynden	14.3	62	887	471,540	920.09
"	Glacier	"	32.4	84	2,722	558,710	1,092.10
"	Deming	"	18.4	5	92	35,010	64.20
"	Columbia	"	18.4	37	681	249,060	492.89
	Total, Jan. to Aug.		....	5,126	138,431	37,330,257	61,416.50
Sept.	Maple Falls	Sumas	14.1	20	282	129,670	293.61
"	" "	Bellingham	37.2	59	2,195	389,470	857.48
"	Goshen	"	10.8	20	216	150,310	367.94
"	Kulshan	"	22.5	267	6,008	2,142,880	3,752.57
"	Deming	"	17.4	37	644	291,500	726.48
"	Glacier	"	44.4	113	5,017	898,060	2,185.72
"	"	Maple Falls	7.2	31	223	217,000*	248.00
"	"	Lynden	32.4	109	3,532	722,500*	1,326.12
"	Nickolay	"	22.2	6	133	43,280	106.05
"	Columbia	"	18.4	6	110	41,600	98.13
"	Nugents	"	14.3	13	186	84,210	199.91
Oct.	"	Sumas	21.3	2	43	11,600	33.96
"	Maple Falls	Bellingham	37.2	177	6,584	1,315,900	3,119.78
"	Kulshan	Bellingham	22.5	331	7,448	2,758,420	4,947.46
"	Deming	"	17.4	9	157	57,960	149.31
"	Glacier	"	44.4	167	7,415	1,339,078	3,145.54
"	"	Lynden	32.4	8	259	52,300	126.95
"	Nugents	"	14.3	7	100	50,000	122.16
Nov.	Glacier	Sumas	21.3	25	533	153,564	375.20
"	Maple Falls	Bellingham	37.2	297	11,048	2,279,590	5,036.48
"	Kulshan	"	22.5	503	11,318	4,387,430	7,654.88
"	Glacier	"	44.4	334	14,830	2,791,220	6,737.85

[fol. 318-26]

Bellingham Division—Continued

Month	From—	To—	Miles	Cars	Car miles	Actual feet, B. M.	Amount revenue
Nov.	Glacier	Lynden	32.4	30	1,166	231,190	564.57
"	Nugents	"	14.3	2	29	12,010	27.61
"	Columbia	"	18.4	10	184	61,280	146.82
"	Deming	"	18.4	5	92	36,260	89.21
Dec.	Maple Falls	"	37.2	15	558	126,630	307.08
"	Glacier	"	44.4	80	3,552	568,804	1,375.78
"	"	"	32.4	18	583	129,010	266.72
	Total, Sept. to Dec.		....	2,707	84,445	21,472,726	44,389.37
	Total 1920		....	7,833	222,876	58,802,983	105,805.87

[fol. 319] C. M. & St. P. Exhibit 24

Chicago, Milwaukee and St. Paul Railway Company

Statement Showing Actual Cost of Repairing Log Flats at Points Shown Below, April to September, 1919 Inclusive, Compiled Under Direction of General Manager

Station	Average number of cars in service per month	Total net cost	Average cost per month all cars	Average cost per month per car	Average cost per day per car	Average loaded car miles per car 6-months period	Average cost per loaded car mile 6-months period
Tacoma	458	$76,464.10	$12,744.02	$27.82	.927	870	.1919
Everett	518	9,895.80	1,649.30	3.18	.106	516	.0369
Cedar Falls	153	3,926.93	654.49	4.28	.142	762	.0396
Spirit Lake	25	12,266.28	2,044.38	81.77	2.72	2,658	.1844
St. Maries	309	31,927.79	5,321.30	17.22	.574	868	.1189
Raymond	151	9,986.06	1,664.34	11.02	.367	402	.1645
Bellingham	204	13,932.24	2,322.04	11.38	.379	786	.0869
Port Angeles	166	16,042.48	2,673.75	16.11	.537	1,032	.0936
All Stations	1,984	174,441.68	29,073.62	14.65	.488	761	.1155
All Stations, Excluding Idaho	1,650	130,247.61	21,707.94	13.16	.438	712	.1109

Note—Low average costs at Everett and Cedar Falls are due to the fact that all cars in need of heavy repairs are sent to Tacoma for repairs.

[fol. 320]

C., M. & St. P. Exhibit No. 25

C., M. & St. P. Ry. Co.

Statement Showing Amounts Assessed Against Logging Companies for Damage to Logging Equipment, State of Washington, During the Years 1919 and 1920

Year 1919

Company	Date paid	Amount
West Fork Logging Co.	5-22-19	$24.66
" " " "	6-18-19	61.88
" " " "	1-14-20	240.07
" " " "	1-14-20	129.32
" " " "	1-14-20	80.00
" " " "	9-29-20	171.34
	.....	1.52
Pacific National Lumber Co.	5-21-19	84.87
Mineral Lake Lumber Co.	11-17-19	30.58
" " " "	11-17-19	33.86
Wheeler-Reese Lumber Co.	1-17-20	251.80
" " " "	2-17-20	76.03
" " " "	2-18-19	485.11
Cascade Timber Co.	1-20-20	463.95
Cherry Valley Lumber Co.	.....	10.94
Hoff & Pinkey	.....	38.98
McCoy-Loggie Timber Co.	.....	49.47
" " " "	.....	39.22
" " " "	.....	21.84
Chinn Timber Co.	.....	29.59
" " "	.....	33.45

" " "	.....	32.87
" " "	.....	32.25
" " "	.....	12.88
" " "	.....	14.65
" " "	.....	25.46
" " "	.....	6.53
" " "	.....	97.87
Carlsborg Mill & Timber Co.	9-4-20	13.25
" " " " "	3-19-20	.74
" " " " "	3-19-20	45.21
Puget Sound Mills & Timber Co.	6-28-19	9.13
" " " " " "	10-8-19	1.21
" " " " " "	1-10-20	202.33
" " " " " "	1-10-20	54.51
" " " " " "	10-8-19	68.74
" " " " " "	1-10-20	23.03
" " " " " "	1-10-20	1.16
Total, 1919		$3,000.30

Year 1920

Wheeler-Reese Lumber Co.	4-14-20	$104.26
" " " "	.....	39.00
Saginaw Timber Co.	4-20-20	511.51
McKenna Lumber Co.	5-3-20	80.00
" " "	11-3-20	260.20
Mineral Lake Logging Co.	5-4-20	145.51
" " " "	7-7-20	174.47
" " " "	7-1-20	34.34

Statement Showing Amounts Assessed—Continued

Company	Date paid	Amount
Mineral Lake Logging Co.	10-12-20	74.72
" " " "	10-26-20	59.93
" " " "	2-1-21	878.61
Fir Tree Lumber Co.	11-6-20	252.77
Doty Lumber Co.	.....	8.77
Johnson-Carr Lumber Co.	10-13-20	30.80
Pacific States Lumber Co.	.....	42.02
North Bend Lumber Co.	6-9-20	210.05
" " " "	11-5-20	116.26
[fol. 321] Linco Log & Lumber Co.	.....	39.25
West Fork Logging Co.	.....	81.79
Cascade Timber Co.	4-17-21	70.24
Willapa Lumber Co.	5-25-21	6.15
Wilson Brothers & Co.	2-16-21	156.78
" " "	3-2-21	130.84
Skagit Log & Boom Co.	12-4-20	68.81
" " " "	10-7-20	19.37
" " " "	7-20-21	497.26
Cherry Valley Timber Co.	4-27-20	55.23
" " " "	4-27-20	198.48
" " " "	11-24-20	149.19
" " " "	11-29-20	142.00
" " " "	4-14-21	378.00
" " " "	6-2-21	344.48
Florence Logging Co.	5-3-21	35.52
A. W. Knight	10-19-20	284.72

[fol. 322]

C., M. & St. P. Ry. Exhibit No. 26

Chicago, Milwaukee & St. Paul Railway Company

Logging Revenues & Expenses per 1,000 Gross Ton Miles and Car Miles, Year 1920

	Coast Division			Bellingham Division			Total		
Train Service:	Amount	Per 1,000 G. T. M.	Per car mile	Amount	Per 1,000 G. T. M.	Per car mile	Amount	Per 1,000 G. T. M.	Per car mile
*314. Freight Train Cars-Repairs	$51,298.01	.5431	.01822	$10,244.23	.7167	.02298	$61,542.24	.5659	.01887
#401. Trainmen	40,393.20	.4276	.01434	11,494.48	.8041	.02579	51,887.68	.4771	.01590
#402. Train Supplies and Expenses	13,083.32	.1385	.00465	3,999.25	.2798	.00897	17,082.57	.1571	.00524
Total Train Service	104,774.53	1.1092	.03721	25,737.96	1.8006	.05774	130,512.49	1.2001	.04001
Engine Service:									
*308. Steam Locomotives—Repairs	48,178.41	.5100	.01711	10,354.81	.7244	.02323	58,533.22	.5382	.01795
*311. Other Locomotive Repairs	20,159.06	.2134	.00716	.....	.....	.....	20,159.06	.1854	.00618
#392. Train Enginemen	21,751.87	.2303	.00773	7,142.17	.4996	.01602	28,894.04	.2657	.00886
#393. Train Motormen	8,594.67	.0910	.00305	.....	.....	.....	8,594.67	.0790	.00263
#394. Fuel for Train Locomotives	53,786.31	.5694	.01910	17,051.71	1.1929	.03825	70,839.02	.6514	.02172
#395. Train Power Produced	4,955.90	.0525	.00176	.....	.....	.....	4,955.90	.0456	.00152
#396. Train Power Purchased	17,716.69	.1876	.00629	.....	.....	.....	17,716.69	.1629	.00543
#397. Water for Train Locomotives	553.01	.0058	.00020	455.73	.0319	.00102	1,008.74	.0093	.00031
#398. Lubricants for Train Locomotives	1,388.48	.0147	.00049	150.84	.0106	.00034	1,539.32	.0141	.00047
#399. Other Supplies for Train Locomotives	1,235.19	.0131	.00044	324.00	.0227	.00073	1,559.19	.0143	.00049
#400. Enginehouse Expenses—Train	8,078.75	.0855	.00287	2,284.81	.1598	.00513	10,363.56	.0953	.00318
Total Engine Service	186,398.34	1.9733	.06620	37,764.07	2.6419	.08472	224,162.41	2.0612	.06874
Total Train & Engine Service	291,172.87	3.0825	.10341	63,502.03	4.4425	.14246	354,674.90	3.2613	.10875
Maintenance of Way & Structures	197,670.63	2.0927	.07021	65,546.51	4.5855	.14705	263,217.14	2.4203	.08071
*Balance of Maintenance of Equipment	41,884.57	.4435	.01488	12,960.78	.9067	.02908	54,845.35	.5043	.01682
Traffic	3,629.05	.0384	.00129	940.60	.0658	.00211	4,569.65	.0420	.00140
#Balance of Transportation	177,692.43	1.8812	.06311	33,771.07	2.3626	.07576	211,463.50	1.9444	.06483
Miscellaneous Operations	1.28	.0000	.00000	.....	.....	.....	1.28	.0000	.00000
General	15,244.83	.1614	.00541	3,563.98	.2493	.00799	18,808.81	.1730	.00577
Transportation for Investment—Credit	[1,036.12]†	[.0110]†	[.00037]†	[542.94]†	[.0380]†	[.00122]†	[1,579.06]†	[.0145]†	[.00048]†
Total Operating Expenses	726,259.54	7.6887	.25794	179,742.03	12.5744	.40323	906,001.57	8.3308	.27780
Taxes	38,962.32	.4125	.01384	18,851.20	1.3187	.04229	57,813.52	.5316	.01773
Interest on Investment—Equiqment	79,320.00	.8397	.02817	14,640.00	1.0242	.03284	93,960.00	.8640	.02881
Interest on Investment—Road	180,631.51	1.9123	.06415	59,858.78	4.1876	.13429	240,490.29	2,2113	.07374
Total Expense	1,025,173.37	10.8532	.36410	273,092.01	19.1049	.61265	1,298,265.38	11.9377	.39808
Total Revenue	720,401.94	7.6267	.25586	105,805.87	7.4019	.23736	826,207.81	7.5971	.25333
Gross Ton Miles	94,458.459	.....	.....	14,294.329	.....	.....	108,725.788	.....	.....
Total Car Miles	2,815.598	.....	.....	445.752	.....	.....	3,261.350	.....	.....

[†Red in copy.]

[fol. 323] C., M. & St. P. Ry. Exhibit No. 27

Chicago, Milwaukee & St. Paul Railway Company

Logging Revenues & Expenses and Car & Gross Ton Mile Statistics, National Park Branch, July, 1921

	Cost of handling logs			Cost per 1,000 gross ton miles	Cost per car mile
	Initial and delivery cost	Line-haul cost	Total cost		
Train Service:					
#314. Freight Train Car—Repairs	$628.57	$670.93	$1,299.50	.5220	.0185
#401. Trainmen	773.15	1,256.36	2,029.51	.8152	.0290
#402. Train Supplies & Expenses	.....	158.66	158.66	.0637	.0023
Total Train Service	1,401.72	2,085.95	3,487.67	1.4009	.0498
Engine Service:					
#308. Steam Locomotives—Repairs	422.25	734.59	1,156.84	.4647	.0165
#311. Other Locomotives—Repairs	.....	.....	.....	.....	....
#392. Train Enginemen	473.87	770.02	1,243.89	.4996	.0178
#393. Train Motormen	.....	.....	.....	.....	....
#394. Fuel for Train Locomotives	536.87	1,139.58	1,675.85	.6731	.0239
#395. Train Power Produced	.....	.....	.....	.....	....
#396. Train Power Purchased	.....	.....	.....	.....	....
#397. Water for Train Locomotives	14.40	30.60	45.00	.0181	.0006
#398. Lubricants for Train Locomotives	14.59	31.00	45.59	.0183	.0006
#399. Other Supplies for Locomotives	10.42	22.16	32.58	.0131	.0005
#400. Enginehouse Expense—Train	118.52	251.86	370.38	.1488	.0053
Total Engine Service	1,590.32	2,979.81	4,570.13	1.8357	.0652
Total Train and Engine Expense	2,992.04	5,065.76	8,057.80	3.2366	.1150
Maintenance of Way & Structures	2,775.45	2,962.50	5,737.95	2.3048	.0820
Balance of Maintenance of Equipment	595.74	635.90	1,231.64	.4947	.0176
Traffic	165.40	.....	165.40	.0664	.0024
Balance of Transportation	2,678.42	1,164.48	3,842.90	1.5436	.0549
Miscellaneous Operations:					
General	226.98	242.27	469.25	.1885	.0067
Transportation for Investment—Credit	[11.67]*	[12.46]*	[24.13]*	[.0097]*	[.0003]*
Total Operating Expenses	9,422.36	10,058.45	19,480.81	7.8249	.2783
Taxes	658.55	702.94	1,361.49	.5469	.0194
Interest on Investment—Equipment	1,343.96	1,434.54	2,778.50	1.1161	.0397
Interest on Investment—Road	3,053.10	3,258.86	6,311.96	2.5353	.0902
Total Expenses	14,477.97	15,454.79	29,932.76	12.0232	.4276
Revenue Reported	.....	.....	$13,562.38	.....	....
Estimated Revenue on 103 cars not reported	.....	.....	1,262.99	.....	....
Total Revenue	.....	.....	14,825.37	5.9550	.2118
Loss	.....	.....	[15,107.39]*	[6.0682]*	[.2158]*
Gross Ton Miles	.....	.....	2,489,582	.....	....
Car Miles	.....	.....	70,075	.....	....
Per Cent of Loss	.....	.....	101.9%	.....	....
Per Cent Initial & Delivery Cost is of Total Cost	.....	.....	48.37%	.....	....

[*Red in copy.]

C., M. & St. P. Ry. Co. Exhibit 28

Statement Showing Distance Rates on Logs, in Dollars and Cents per 1,000 Feet, Compared With Distance Rates on Slabwood, Fuelwood, etc., Lumber, Sand,

Distances, miles	Logs on ordinary flat cars: Between all stations on C., M. & St. P. Ry., Bellingham, Wn., and north thereof		Logs on ordinary flat cars: Between all stations on C., M. & St. P. Ry., National Park branch, Hillsdale, Wn., and south thereof		Logs on ordinary flat cars: Between all stations on C., M. & St. P. Ry., Coast Division, Ellensburg, Wn., and west thereof, except National Park branch		(4) Slabwood, between all stations on C., M. & St. P. Ry. in Washington			Lumber: Between all stations on C., M. & St. P. Ry., Coast Division, Cedar Falls, and West			Lumber: Between all stations in Washington on C., M. & St. P. Ry. east of Cedar Falls, also between such stations and stations — Cedar Falls and West			Sand, between all stations on C., M. & St. P. Ry. in Washington		
	Per 1,000 feet unit of (1) 8,210 lbs.	Total car earnings (5) 7,823 feet average	Per 1,000 feet unit of (1) 8,210 lbs.	Total car earnings (5) 7,826 feet average	Per 1,000 feet unit of (1) 8,210 lbs.	Total car earnings (5) 7,826 feet average	Per unit of 8,210 lbs. (2) (3)	Rate in cents per cord	Total car earnings based on 40 ft. open car 13 cord cap	(2) Unit of 8,210 lbs.	Rate in cents per 100 lbs.	Total car earnings based on 40 ft. box car, min. wt. 55,000 lbs.	(2) Unit of 8,210 lbs.	Rate in cents per 100 lbs.	Total car earnings based on 40 ft. box car, min. wt. 55,000 lbs.	(2) Unit of 8,210 lbs.	S. L. haul, rate in cents per 100 lbs.	Total car earnings based on tariff, min. wt. 60,000 lbs.
	(a)		(b)		(c)			(e)			(h)			(i)			(j)	
5	$1.95½	$15.30	$1.25	$9.78	$1.56½	$12.25	$2.21	115	$20.70	$2.46	3	$16.65	$2.46	3	$16.65	$2.46	3	$18.00
10	1.95½	15.30	1.40½	11.00	1.56½	12.25	2.21	115	20.70	4.11	5	27.75	4.11	5	27.75	2.46	3	18.00
15	2.34½	18.35	1.56½	12.25	1.75½	13.73	2.40	125	22.50	4.11	5	27.75	5.34	6½	36.08	2.46	3	18.00
20	2.34½	18.35	1.72	13.46	2.11½	16.55	2.40	125	22.50	4.11	5	27.75	5.34	6½	36.08	2.46	3	18.00
25	2.34½	18.35	1.87½	14.66	2.19	17.14	2.59	135	24.30	4.52	5½	30.53	6.57	8	44.40	3.28	4	24.00
30	2.34½	18.35	1.95½	15.30	2.27	17.77	2.59	135	24.30	5.34	6½	36.08	7.80	9½	52.73	3.28	4	24.00
35	2.34½	18.35	2.03	15.89	2.34½	18.35	2.78	145	26.10	5.34	6½	36.08	7.80	9½	52.73	3.69	4½	27.00
40	2.34½	18.35	2.03	15.89	2.42½	18.98	2.78	145	26.10	5.34	6½	36.08	9.45	11½	63.83	3.69	4½	27.00
45	2.34½	18.35	2.11½	16.55	2.50	19.57	2.98	155	27.90	5.34	6½	36.08	9.45	11½	63.83	4.11	5	30.00
50	2.34½	18.35	2.11½	16.55	2.58	20.19	2.98	155	27.90	5.75	7	38.85	10.26	12½	69.38	4.11	5	30.00

(a) Item 350-A, Sup. 4, C., M. & St. P. Ry. G. F. D. No. 13825-A, I. C. C. No. B-3804, W. P. S. C. No. 328.
(b) Item 345, Page 10, C., M. & St. P. Ry. G. F. D. No. 13825-A, I. C. C. No. B-3804, W. P. S. C. No. 328.
(c) Item 300-B, Sup. 4, C., M. & St. P. Ry. G. F. D. No. 13825-A, I. C. C. No. B-3804, W. P. S. C. No. 328.
(d) Item 3500, page 230, N. P. C. F. B. Tariff No. 1, S. J. Henry, Agent I. C. C. No. 9, W. P. S. C. No. 1.
(e) Schedule 1, N. P. C. F. B. Tariff No. 15-B, S. J. Henry, Agent I. C. C. No. 59, W. D. P. W. No. 56, also C., M. & S. P. Ry. G. F. D. No. 12650-C, I. C. C. No. B-3924, W. P. S. C. No. 303.
(f) Schedule 4, page 95, N. P. C. F. B. Tariff No. 11, S. J. Henry, Agent I. C. C. No. 48, W. D. P. W. No. 45.
(g) Schedule 3, page 94, N. P. C. F. B. Tariff No. 11, S. J. Henry, Agent I. C. C. No. 48, W. D. P. W. No. 45.
(h) Item 350, C,, M. & St. P. Ry. G. F. D. No. 11890-D, I. C. C. No. B-4360, W. P. S. C. No. 399.
(i) Column No. 1 rates Item 375, C., M. & St. P. Ry. G. F. D. No. 11890-D, I. C. C. No. B-4360, W. P. S. C. No. 399.
(j) N. P. C. F. B. Tariff No. 25-B, S. J. Henry, Agent I. C. C. No. 53, W. P. S. C. No. 50, also C., M. & St. P. Ry. G. F. D. No. 12650-C, I. C. C. No. B-3924, W. P. S. C. No. 303.

*Item No. 130, page 44, S. J. Henry's Tariff No. 11, W. D. P. W. No. 45, provides that minimum charge for a line haul carload shipment shall be $15.00.

(1) Unit of 8,210 lbs. arrived at by taking No. 9, W. D. P. W. Cause No. 5159.
(2) Unit of 8,210 lbs. selected for purpose of
(3) Average weight of 4,276 lbs. for one cord Green Slabwood moving during December, 1920, I. C. C. I. & S. Docket No. 1251.
(4) Scale of rates shown as applicable on Sl sion in I. & S. Docket No. 1251 and order dated
(5) 7,826 feet average arrived at by taking av No. 5159.

C., M. & St. P. Ry. Co. Exhibit 28

Feet, Compared With Distance Rates on Slabwood, Fuelwood, etc., Lumber, Sand, Brick, Potatoes, and Onions in State of Washington.

Lumber										Potatoes and onions					
ween all stations on C., M. St. P. Ry., Coast Divis., Cedar Falls, and West		Between all stations in Washington on C., M. & St. P. Ry. east of Cedar Falls, also between such stations and stations — Cedar Falls and West			Sand, between all stations on C., M. & St. P. Ry. in Washington			Brick, between all stations on C., M. & St. P. Ry., Cedar Falls and west thereof, except stations on Olympic Division			Between all stations on C., M. & St. P. Ry. in Washington on Coast Division west of Earlington			Between all stations on C., M. & St. P. Ry. in Washington east of Earlington, also between stations east and west of Earlington		
Rate in cents per 100 lbs.	Total car earnings based on 40 ft. box car, min. wt. 55,000 lbs.	(2) Unit of 8,210 lbs.	Rate in cents per 100 lbs.	Total car earnings based on 40 ft. box car, min. wt. 55,000 lbs.	(2) Unit of 8,210 lbs.	S. L. haul, rate in cents per 100 lbs.	Total car earnings based on tariff, min. wt. 60,000 lbs.	(2) Unit of 8,210 lbs.	Rate in cents per 100 lbs.	Total car earnings based on tariff, min. wt. 50,000 lbs.	(2) Unit of 8,210 lbs.	Rate in cents per 100 lbs.	Total car earnings based on tariff, min. wt. 36,000 lbs.	(2) Unit of 8,210 lbs.	Rate in cents per 100 lbs.	Total car earnings based on tariff, min. wt. 36,000 lbs.
(h)			(i)			(j)			(d)			(f)			(g)	
3	$16.65	$2.46	3	$16.65	$2.46	3	$18.00	$4.11	5	$25.00	$3.28	4	*$14.40	$4.11	5	$18.00
5	27.75	4.11	5	27.75	2.46	3	18.00	5.34	6½	32.50	4.11	5	15.80	4.11	5	18.00
5	27.75	5.34	6½	36.08	2.46	3	18.00	5.34	6½	32.50	4.52	5½	19.80	6.57	8	28.80
5	27.75	5.34	6½	36.08	2.46	3	18.00	5.75	7	35.00	5.34	6½	23.40	7.39	9	32.40
5½	30.53	6.57	8	44.40	3.28	4	24.00	5.75	7	35.00	5.75	7	25.20	7.80	9½	34.20
6½	36.08	7.80	9½	52.73	3.28	4	24.00	6.16	7½	37.50	6.57	8	28.80	9.45	11½	41.40
6½	36.08	7.80	9½	52.73	3.69	4½	27.00	6.16	7½	37.50	6.57	8	28.80	9.85	12	43.20
6½	36.08	9.45	11½	63.83	3.69	4½	27.00	6.57	8	40.00	7.39	9	32.40	10.26	12½	45.00
6½	36.08	9.45	11½	63.83	4.11	5	30.00	6.57	8	40.00	7.80	9½	34.20	10.26	12½	45.00
7	38.85	10.26	12½	69.38	4.11	5	30.00	7.59	9	45.00	8.21	10	36.00	11.90	14½	52.20

(1) Unit of 8,210 lbs. arrived at by taking 1,000 ft. logs at average weight of 8.21 lbs. per foot board measure, C., M. & St. P. Ry. Exhibit No. 9, W. D. P. W. Cause No. 5159.

(2) Unit of 8,210 lbs. selected for purpose of comparison with revenue on logs for which weight was arrived at as per (1) footnote above.

(3) Average weight of 4,276 lbs. for one cord slabwood arrived at by figuring the actual weights of 39 cars of Forest Wood, Dry Slabwood and Green Slabwood moving during December, 1920, in State of Washington as per C., M. & St. P. Ry. Exhibit No. 8 in W. D. P. W. Cause No. 5150,

, M. & S. P. Ry. G. F. D. No.

I. C. C. I. & S. Docket No. 1251.

(4) Scale of rates shown as applicable on Slabwood is basis established under order dated March 26, 1921, of Interstate Commerce Commission in I. & S. Docket No. 1251 and order dated April 18, 1921, of Department of Public Works of State of Washington in Cause No. 5150.

(5) 7,826 feet average arrived at by taking average of 147 cars actually weighed as per C., M. & St. P. Ry. Exhibit No. 9, W. D. P. W. Cause No. 5159.

No. 399.

Ry. G. F. D. No. 12650-C, I. C. C.

a line haul carload shipment

McCoy-Loggie Timber Co.	11-24-20	26.85
" " " "	.....	85.70
" " " "	.....	233.72
" " " "	.....	88.14
" " " "	.....	43.39
Allen & McRae	.....	77.26
" " "	.....	5.71
Hoff & Pinkey	.....	6.63
" " "	.....	113.35
" " "	.....	56.37
Chinn Timber Co.	.....	196.56
Puget Sound Mills & Timber Co.	3-26-21	36.70
" " " " "	1-18-21	33.91
Total, 1920		$6,685.62
Total 1919 and 1920		9,685.92

Statistics

Total amount of bills paid	$9,685.92	60%
" " " " unpaid 6-20-21	5,706.28	35.4%
" " " " cancelled	736.95	4.6%
" " " " rendered	$16,129.15	100.0%

Amounts paid by loggers to C., M. & St. P. Ry. Co. for equipping cars with patent log bunks during the past five years ..... None

(Here follow C., M. & St. P. Ry. Exhibits Nos. 26, 27, and 28, marked side folio pages 322, 323, and 324.)

[fol. 325] C., M. & St. P. Exhibit No. 29

Chicago, Milwaukee & St. Paul Railway Company

Corrections of Associated Log Shippers' Revised Exhibit No. 4, Showing Comparative Financial Results, Log Traffic, and Other Freight Traffic, State of Washington, 1920, for C., M. & St. P. Ry. Co.

Method No. 1

In Accord with Mr. Gray's Intended Method

Line- 1 to 7 (incl.) are correct, Line 7 being the cost per M Gross Ton Miles of Revenue & Non Revenue Freight.

Total Revenue Ton Miles Frt. from Annual Report..	742,859,992
Total Non Revenue Ton Miles " " " ..	112,614,817
Total Net Ton Miles as shown in Line 4.....	865,474,809

Ratio of Net Ton Miles to Revenue Ton Miles $= \frac{865,474,809}{742,859,992} = 1.165$

Line 8 is correct being Tare Ton Miles Log Cars only and contains no proportion of Tare Ton Miles of Non Rev. Freight.

Line 9 is correct, the amount 60,455,454 being the Revenue Ton Miles of Logs and contains no proportion of Non Revenue Net Ton Miles.

Line 10, which is the sum of Line 8 and Line 9 is the Gross Ton Miles of Logs Traffic only and contains no proportion of Non Revenue Gross Ton wholly contained in Line 5 Total Gr. Ton Miles from which line was derived Line 6 which is cost Per M Gross Ton Miles of all Freight for State of Washington including Non Revenue Frt.

Line 10 should be corrected to absorb its just proportion of Non Revenue Gross Ton Miles by using the Ratio of Net Ton Miles to Revenue Ton Miles of 117,031,358 x 1.165 or 136,341,531.

Line 11, which is Cost of Operation of Log Traffic is incorrect and should be product of Line 10 as corrected and Line 7, or 832,368.

Line 12 is Correct, showing Gross Revenue from Logs, 1,032,357.

[fol. 325a] Line 13, Net Revenue from Logs, is incorrect and should be Line 12 minus Line 11 as corrected, $199,989.

Line 14 is incorrect and should be *$3,574,034.

Line 15 is correct.

*Indicates red figures.

200A. Comparative General Balance Sheet—Asset Side

For instructions covering this schedule, see the text pertaining to General Balance Sheet Accounts in the Uniform System of Accounts for Steam Railway Corporations. The entries in this balance sheet should be consistent with those in the supporting schedules on the pages indicated. The entries in the short column (b_2) should be deducted from those in column (b_1) *in order to obtain corresponding entries for* column (c). All credit entries hereunder should be in red ink. The making of entries in column (d) is optional.

Line No.	Balance at beginning of year (a)	Item (b)	(b_1) Total book assets at close of year	(b_2) Respondent's own issues included in (b_1)	Schedule No.	Balance at close of year (c)	Net change during year. (Increase in black, decrease in red) (d)
1		**Investments**					
2	$633,535,470.96	(701) Investment in road and equipment (p. 203)			211	$655,225,960.02	
3		(702) Improvements on leased railway property (p. 203)			211		
4	7,141.13	(703) Sinking funds (p. 210)			214		
5	558,105.73	(704) Deposits in lieu of mortgaged property sold (p. 211)			215	454,559.58	
6	3,656,770.08	(705) Miscellaneous physical property, (p. 207)			212	3,838,145.70	
7		(706) Investments in affiliated companies:					
8	4,447,542.45	(A) Stocks				4,447,542.45	
9	110,000.00	(B) Bonds				110,000.00	
10		(C) Notes					
11	19,007,612.86	(D) Advances (p. 218)			220	19,408,212.48	
12		(707) Other investments:					
13	1,345,515.49	(A) Stocks				1,345,515.49	
14	20,100.00	(B) Bonds				572,250.00	
15	441,250.00	(C) Notes				467,250.00	
16		(D) Advances (p. 218)			220		
17		(E) Miscellaneous					
18	663,129,508.70	Total investments				685,869,435.72	
19		**Current Assets**					
20	4,971,634.73	(708) Cash				8,087,980.47	
21		(709) Demand loans and deposits					
			(b_1) Total book assets at close of year	(b_2) Respondent's own issues included in (b_1)			
22		(710) Time drafts and deposits					
23	5,374,171.41	(711) Special deposits (p. 211)			218	1,659,149.24	
24	36,094.14	(712) Loans and bills receivable (p. 218)			223	23,492.79	
25	28,844.62	(713) Traffic and car-service balances receivable				1,669,403.22	
26		(714) Net balance receivable from agents and conductors				3,872,452.45	
27	28,622,530.45	(715) Miscellaneous accounts receivable				8,041,448.73	
28		(716) Material and supplies				20,490,021.56	
29	5,945,732.02	(717) Interest and dividends receivable				3,467,740.03	
30		(718) Rents receivable					
31		(719) Other current assets				7,953,109.05	
32	44,979,007.37	Total current assets				55,264,797.54	
33		**Deferred Assets**	(b_1) Total book assets at close of year	(b_2) Respondent's own issues included in (b_1)			
34		(720) Working fund advances				116,750.80	
35	750,000.00	(721) Insurance and other funds (p. 219)	2,969,766.81	2,644,766.81	236	325,000.00	
36	40,657,606.10	(722) Other deferred assets				375,585.49	
37	41,407,606.10	Total deferred assets				817,336.29	
38		**Unadjusted Debits**					
39		(723) Rents and insurance premiums paid in advance					
40		(724) Discount on capital stock					
41		(725) Discount on funded debt					
42		(726) Property abandoned chargeable to operating expenses					
				Par values of holdings at close of year			
43	734,523.24	(727) Other unadjusted debits (p. 218)			238	4,277,766.56	
44		(728) Securities issued or assumed—Unpledged		197,011,000			
45		(729) Securities issued or assumed—pledged		36,893,000			
46	734,523.24	Total unadjusted debits				4,277,766.56	
47	750,950,845.41	Grand Total				746,229,336.11	

CHART

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300P. Profit and Loss Account

Show hereunder the items of the Profit and Loss Account of the respondent for the year, classified in accordance with the Uniform System of Accounts for Steam Railway Corporations. The sum of the dividends stated in this account and those stated in the Income Account (p. 301) for any particular class of stock should equal the total amount of dividends declared on such class during the year as shown in schedule No. 300D, columns (e) and (f).

Line No.	Item (a)	Debits (b)	Credits (c)	Remarks (d)
		$ c.	$ c.	
1	*Credit balance at beginning of year (p. 201)	.....	42,380,342.89	
2	Credit balance transferred from Income (p. 301)	.....	4,366,070.51	
3	(603) Profit on road and equipment sold (p. 323)	.....	3,543.18	
4	(604) Delayed income credits (p. 323)	.....	.....	
5	(605) Unrefundable overcharges	.....	24,346.26	
6	(606) Donations (p. 323)	.....	154,973.37	
7	(607) Miscellaneous credits (p. 323)	.....	399,979.15	
8	Debit balance transferred from Income (p. 301)			
9	(613) Surplus applied to sinking and other reserve funds (p. 322)			
10	(614) Dividend appropriations of surplus (p. 302)			
11	(615) Surplus appropriated for investment in physical property (p. 322)	154,973.37		
12	(616) Stock discount extinguished through surplus	.....		
13	(617) Debt discount extinguished through surplus	3,947.19		
14	(618) Miscellaneous appropriations of surplus (p. 322)	.....		
15	(619) Loss on retired road and equipment (p. 323)	488,002.60		
16	(620) Delayed income debits (p. 323)	.....		
17	(621) Miscellaneous debits (p. 323)	8,306,165.25		
18	*Credit balance carried to Balance Sheet	38,376,166.95		
19	Total	47,329,255.36	47,329,255.36	

300D. Dividends Declared During the War

Give particulars of each dividend declared during the year and charged to Income or to Profit and Loss. If any such dividend was payable in anything other than cash, explain the matter fully in a footnote. If an obligation of any character has been incurred for the purpose of procuring funds for the payment of any dividend or for the purpose of replenishing the treasury of the respondent after payment of any dividend, give full particulars in a footnote; if none has been incurred for such purpose, state that fact.

Line No.	Name of security on which dividend was declared (a)	Rate per cent: Regular (b)	Rate per cent: Extra (c)	Par value of amount on which dividend was declared (d)	Distribution of charge: Income (e)	Distribution of charge: Profit and loss (f)	Date: Declared (g)	Date: Payable (h)
					$ c.	$ c.	$ c.	
41								
42								
43								
44								
45								
46								
47								
48	None.							
49								
50								
51								
52								
53	Total				.....	.....	.....	

*Insert "Debit" or "Credit," as may be appropriate.

Report for the Year Ended December 31, 1920

310. Railway Operating Revenues

[For Companies Making Operating Reports]

State the railway operating revenues of the respondent for the year (classified in accordance with the Uniform System of Accounts for Steam Railway Corporations), and the comparison of such revenues with those of the preceding year (showing increases in black and decreases in red) for each of the several classes. The proportion of joint traffic receipts belonging to other carriers should not be included in column (b).

Line No.	Class of railway operating revenues (a)	Total amount of revenue for the year (b)	Comparison with total revenue of preceding year (increases in black, decreases in red) (c)	Revenues earned within the State: On intrastate traffic (d)	Revenues earned within the State: On interstate traffic (e)	Total (f)
1	(101) Freight	117,183,815.31	10,895,362.06	3,017,886.86	4,347,894.87	7,365,781.73
2	(102) Passenger	31,033,594.19	641,673.22	1,009,965.83	930,951.97	1,940,917.80
3	(103) Excess baggage	247,066.18	6,312.38	7,087.50	8,807.22	15,894.72
4	(104) Sleeping car	2,025,315.73	249,975.64	71,244.79	113,770.33	185,015.12
5	(105) Parlor and chair car	83,216.17	13,625.88	4,660.36	5.23#	4,655.13
6	(106) Mail	6,207,635.60	4,422,511.05	85,332.56	78,642.38	163,974.94
7	(107) Express	4,477,179.49	959,269.04	92,503.55	85,251.15	177,754.70
8	(108) Other passenger-train	42,555.77	23,944.66#	525.19	469.27	994.46
9	(109) Milk	1,338,882.69	67,802.14	6,427.11	859.90	7,287.01
10	(110) Switching	2,287,184.14	265,517.53	125,297.12	.....	125,297.12
11	(111) Special service train	30,561.83	6,052.09#	2,273.18	2.83	2,276.01
12	(112) Other freight-train					
13	(113) Water transfers—Freight					

None.

Total .....

*Insert "Debit" or "Credit," as may be appropriate.

Report for the Year Ended December 31, 1920

310. Railway Operating Revenues

[For Companies Making Operating Reports]

State the railway operating revenues of the respondent for the year (classified in accordance with the Uniform System of Accounts for Steam Railway Corporations), and the comparison of such revenues with those of the preceding year (showing increases in black and decreases in red) for each of the several classes. The proportion of joint traffic receipts belonging to other carriers should not be included in column (b).

Line No.	Class of railway operating revenues (a)	Total amount of revenue for the year (b)	Comparison with total revenue of preceding year (increases in black, decreases in red) (c)	Revenues earned within the State: On intrastate traffic (d)	Revenues earned within the State: On interstate traffic (e)	Total (f)
1	(101) Freight	117,183,815.31	10,895,362.06	3,017,886.86	4,347,894.87	7,365,781.73
2	(102) Passenger	31,033,594.19	641,673.22	1,009,965.83	930,951.97	1,940,917.80
3	(103) Excess baggage	247,066.18	6,312.38	7,087.50	8,807.22	15,894.72
4	(104) Sleeping car	2,025,315.73	249,975.64	71,244.79	113,770.33	185,015.12
5	(105) Parlor and chair car	83,216.17	13,625.88	4,660.36	5.23#	4,655.13
6	(106) Mail	6,207,635.60	4,422,511.05	85,332.56	78,642.38	163,974.94
7	(107) Express	4,477,179.49	959,269.04	92,503.55	85,251.15	177,754.70
8	(108) Other passenger-train	42,555.77	23,944.66#	525.19	469.27	994.46
9	(109) Milk	1,338,882.69	67,802.14	6,427.11	859.90	7,287.01
10	(110) Switching	2,287,184.14	265,517.53	125,297.12	.....	125,297.12
11	(111) Special service train	30,561.83	6,052.09#	2,273.18	2.83	2,276.01
12	(112) Other freight-train					
13	(113) Water transfers—Freight					
14	(114) Water transfers—Passenger					
15	(115) Water transfers—Vehicles and live stock					
16	(116) Water transfers—Other					
17	Total rail-line transportation revenue	164,957,007.10	17,492,052.19	4,423,204.05	5,566,644.69	9,989,848.74
18	(121) Freight					
19	(122) Passenger					
20	(123) Excess baggage					
21	(124) Other passenger service					
22	(125) Mail					
23	(126) Express					
24	(127) Special service					
25	(128) Other					
26	Total water-line transportation revenue					
27	(131) Dining and buffet	1,139,879.58	129,106.25	1,787.10	117,521.65	119,308.75
28	(132) Hotel and restaurant	7,283.59	6,365.82#	.....	.....	.....
29	(133) Station, train, and boat privileges	108,078.54	23,373.17	6,846.33	.....	6,846.33
30	(134) Parcel room	4,255.24	611.71	528.10	.....	258.10
31	(135) Storage—Freight	173,027.50	41,984.62#	15,332.29	.....	15,332.29
32	(136) Storage—Baggage	25,627.86	1,545.69	6,758.46	.16	6,758.62
33	(137) Demurrage	826,387.23	174,461.12	41,448.03	.....	41,448.03
34	(138) Telegraph and telephone	137,247.37	24,837.51	13,795.67	.....	13,795.67
35	(139) Grain elevator	.....	.....	.....	.....	.....
36	(140) Stockyard	136,408.03	97,141.36#	1,653.22	.....	1,653.22
37	(141) Power	104.00	24.00	.....	.....	.....
38	(142) Rents of buildings and other property	145,563.48	15,083.15	21,834.92	.....	21,834.92
39	(143) Miscellaneous	419,157.05	134,162.07	175,481.88	.....	175,481.88
40	Total incidental operating revenue	3,123,019.47	357,712.86	285,196.00	117,521.81	402,717.81
41	(151) Joint facility—Cr.	85,047.89	56,743.34#	12,711.44	.....	12,711.44
42	(152) Joint facility—Dr.	6,340.31	4,681.83#	.....	.....	.....
43	Total joint facility operating revenue	78,707.58	61,425.17#	12,711.44	.....	12,711.44
44	Total railway operating revenues	168,158,734.15	17,788,339.88	4,721,111.49	5,684,166.50	10,405,277.99

50. State the rule or rules used by the respondent in assigning revenues from interstate traffic to the several States in which such traffic moves. Revenues from traffic handled between local points within the State are all assigned to Washington. Revenues from Interstate traffic passing into, out of, or through the state are assigned to Washington on basis of mileage pro rate.

#Red Fig.

531B. Statistics of Rail-Line Operations—Within the State

[For Companies Making Operating Reports]

Give the various statistical items called for concerning the rail-line operations of respondent's road during the year, regardless to changes in form of control. If the respondent for its own purposes uses more accurate methods than are provided below for computing the required averages, the more accurate figures should be given in the returns, and the method of computing each average should be indicated in a footnote. Train-miles, locomotive-miles, car-miles, motor car-miles, and other particulars are to be classified in accordance with the Uniform System of Accounts for Steam Railway Corporations. Particulars of electric operations not provided for in the form given below should be stated in a memorandum at the foot of the next page.

Instructions Regarding Various Items

The items are designated hereunder by the numbers attached to them in the table.

1 includes road operated under trackage rights.

81 includes all freight the revenue from which is includible in account No. 101, "Freight."

82 includes only that nonrevenue freight which is hauled on transporation trains.

85 relates to the freight included in 82.

103 is the aggregate of revenue accounts Nos. 102 to 109, inclusive. (See page 303.)

111 = 13 ÷ 1.
112 = 14 ÷ 1.
113 = 15 ÷ 1.
114 = 16 ÷ 1.
115 = 17 ÷ 1.
116 = 18 ÷ 1.
117 = 41 ÷ 1.
118 = (55 + 61 + 62 + 63 + 69 + 70 + 71) ÷ 1.
119 = (60 + 64 + 65 + 66 + 67 + 72 + 73 + 74 + 75) ÷ 1.
120 = 101 ÷ 1.
121 = 103 ÷ 1.
122 = 104 ÷ 1.
123 = 105 ÷ 1.
124 = 106 ÷ 1.
125 = 84 ÷ 1.
126 = 86 ÷ 1.
127 = 92 ÷ 1.
131 = 51 ÷ 13.
132 = 61 ÷ 15.
133 = 52 ÷ 13.
134 = 62 ÷ 15.
135 = 84 ÷ (13 + 15).
136 = 86 ÷ (13 + 15).
137 = 60 ÷ 14.
138 = (64 + 65 + 66 + 67) ÷ 15.
139 = 92 ÷ (14 + 15).
140 = 101 ÷ (13 + 15).
141 = 103 ÷ (14 + 15).
142 = 104 ÷ 17.
143 = 105 ÷ 17.
144 = 106 ÷ 17.
151 = 13 ÷ 24.
152 = 55 ÷ 24.
153 = 14 ÷ 28.
154 = 60 ÷ 28.
155 = 15 ÷ 32.
156 = 68 ÷ 32.
157 = 16 ÷ 36.
158 = 76 ÷ 36.
161 = 84 ÷ (51 + 61).
162 = 86 ÷ (51 + 61).
163 = 101 ÷ (51 + 61).
171 = 92 ÷ (56 + 57 + 64 + 65.
172 = 102 ÷ (56 + 57 + 64 + 65).
181 = 84 ÷ 81.
182 = 85 ÷ 82.
183 = 86 ÷ 83.
184 = 92 ÷ 91.
185 = .101 ÷ 81.
186 = .101 ÷ 84.
187 = .102 ÷ 91.
188 = .102 ÷ 92.
189 = .105 ÷ 104.

Item No.	Item (a)	Amount (b)
1.	Average mileage of road operated, † (miles)	1,088.84
	Train-Miles	
11.	Freight—ordinary	1,307,132
12.	" —light	53,804
13.	" total	1,360,936
14.	Passenger	1,008,978
15.	Mixed	114,313
16.	Special	272
17.	Total transportation service	2,484,499
18.	Work service	253,136
	Locomotive-Miles	
21.	Freight—principal	1,360,936
22.	" —helper	77,809
23.	" —light	80,210
24.	" —total	1,518,955
25.	Passenger—principal	975,412
26.	" —helper	30,403
27.	" —light	37,322
28.	" —total	1,043,139
29.	Mixed train—principal	114,313
30.	" " —helper	30
31.	" " —light	6
32.	" " —total	114,349
33.	Special—principal	272
34.	" —helper	94
35.	" —light	.....
36.	" —total	366
37.	Train switching	168,373
38.	Yard switching—freight	580,646
39.	" " —passenger	.....
40.	" " —total	580,646
41.	Total transportation service	3,425,826
42.	Work service	253,136
46.		
47.		
48.		
49.		
50.		

Item No.	Item (c)	Amount (d)
	Car-Miles—Continued	
58.	Passenger train—dining	551,905
59.	" " —other	1,448,892
60.	" " —total	6,703,330
61.	Mixed train—freight—loaded	607,246
62.	" " — " —empty	395,704
63.	" " —caboose	4,855
64.	" " —passenger	108,182
65.	" " —sleeping, parlor and observation	.....
66.	" " —dining	.....
67.	" " —other passenger-train	1,022
68.	" " —total	1,117,009
69.	Special train—freight—loaded	4,352
70.	" " — " —empty	.....
71.	" " —caboose	272
72.	" " —passenger	961
73.	" " —sleeping, parlor, and observation	9
74.	" " —dining	.....
75.	" " —other passenger-train	.....
76.	" " —total	5,594
77.	Total transportation service	55,911,550
78.	Work service	1,931,702
	Freight Service	
81.	Tons—revenue freight	6,564,916
82.	" —nonrevenue freight	574,248
83.	" —total	7,139,164
84.	Ton-miles—revenue freight	742,859,992
85.	" " —nonrevenue freight	122,614,817
86.	" " —total	865,474,809
	Passenger Service	
91.	Passengers carried—revenue	716,102
92.	Passenger-miles—revenue	62,907,580
	Revenues and Expenses	
101.	Freight revenue †	$7,365,781.73
102.	Passenger revenue †	1,940,917.80
103.	Passenger service train revenue †	2,496,493.88
104.	Operating revenues †	10,405,277.99
105.	" expenses †	14,041,449.40
106.	Net operating revenues †	3,636,171.41
	Averages per Mile of Road	

37.	Train switching	168,373
38.	Yard switching—freight	580,646
39.	" " —passenger	
40.	" " —total	580,646
41.	Total transportation service	3,425,826
42.	Work service	253,136
46.		
47.		
48.		
49.		
50.		

Car-Miles

51.	Freight train—loaded	29,823,395
52.	" " —empty	16,912,739
53.	Sum of loaded and empty	46,736,134
54.	Freight train—caboose	1,349,483
55.	" " —total	48,085,617
56.	Passenger train—passenger	2,086,978
57.	" " —sleeping, parlor, and observation	2,615,555

86.	" " —total	865,474,809

Passenger Service

91.	Passengers carried—revenue	716,102
92.	Passenger-miles—revenue	62,907,580

Revenues and Expenses

101.	Freight revenue †	$7,365,781.73
102.	Passenger revenue †	1,940,917.80
103.	Passenger service train revenue †	2,496,493.88
104.	Operating revenues †	10,405,277.99
105.	" expenses †	14,041,449.40
106.	Net operating revenues †	3,636,171.41

Averages per Mile of Road

111.	Freight-train miles	1,250
112.	Passenger-train miles	927
113.	Mixed-train miles	105
114.	Special-train miles	
115.	Transportation service train-miles	2,282
116.	Work-train miles	232
117.	Locomotive-miles—transportation	3,146

Average per Mile of Road—Continued

Item No.	Item (a)	Amount (b)
118.	Freight service car-miles	45,092
119.	Passenger service car-miles	6,258
120.	Freight revenue †	$6,764.80
121.	Passenger service train revenue †	2,292.80
122.	Operating revenues †	9,556.30
123	" expenses †	12,895.80
124.	Net operating revenue †	3,339.49
125.	Ton-miles—revenue freight	682,249
126.	" —all freight	794,859
127.	Passenger-miles—revenue	57,775
131.	Loaded freight car-miles—freight trains †	21.91
132.	" " " " —mixed " †	5.31
133.	Empty " " " —freight " †	12.43
134.	" " " " —mixed " †	3.46
135.	Ton-miles—revenue freight †	503.55

Averages per Train-mile

136.	" —all freight †	586.66
137.	Passenger train car-miles—passenger trains †	6.64
138.	" " " " —mixed trains †	.96
139.	Revenue passenger-miles †	56.00
140.	Freight revenue †	$4.99
141.	Passenger service train revenue †	2.22
142.	Operating revenues †	4.19
143.	" expenses †	5.65
144.	Net operating revenues †	1.46

Average per Locomotive—Mile

Item No.	Item (c)	Amount (d)
151.	Train-miles—freight trains †	.90
152.	Car-miles—freight trains †	31.66
153.	Train-miles—passenger trains †	97
154.	Car-miles—passenger trains †	6.43
155.	Train-miles—mixed trains †	1.00
156.	Car-miles—mixed trains †	9.77
157.	Train-miles—special trains †	.74
158.	Car-miles—special trains †	15.28

Average per Loaded Freight Car-Mile

161.	Ton-miles—revenue freight †	24.41
162.	" —all freight †	28.44
163.	Freight revenue ‡	242.05

Averages per Car-mile—Passenger

171.	Passenger-miles—revenue †	13.08
172.	Passenger revenue †	403.46

Miscellaneous Averages

181.	Miles hauled—revenue freight †	113.16
182.	" " —nonrevenue freight †	213.52
183.	" " —all freight †	121.23
184.	Miles carried—revenue passengers †	87.85
185.	Revenue per ton of freight †	1,121.99
186.	" " ton-mile of freight ‡	.00992
187.	" " passenger ‡	2.71039
188.	" " passenger-mile ‡	.03085
189.	Operating ratio †	%134.95

200. State hereunder the car-miles made on the lines of the respondent within the State by privately owned freight cars and included in the items above given.

51.	Freight train—loaded	All trains	3,412,489
52.	" " —empty		
53.	Sum of loaded and empty		
61.	Mixed train—freight—loaded		
62.	" " " —empty		
69.	Special train—freight—loaded		
70.	" " " —empty		

Train miles for trains hauled by motor cars included in Item 14	33,566
Electric Locomotive Miles included in Item 21	230,350
" " " " " " 22	60,031
" " " " " " 23	43,568
" " " " " " 25	236,409
" " " " " " 26	10,379
" " " " " " 27	11,883
" " " " " " 33	28
" " " " " " 34	28
" " " " " " 37	13,211
" " " " " " 38	34,128
" " " " " " 42	7,896
Car Miles for trains hauled by motor cars included in Item 56	33,566
#Tons Revenue Freight (Intrastate)	3,953,384
Ton Miles Revenue Freight	144,435,920
Passengers carried Revenue	476,839
Passenger Miles Revenue	31,950,342

†Two decimal places required. ‡Five decimal places required.

531. Statistics of Rail-Line Operations

Give the various statistical items called for concerning the rail-line operations of respondent's road during the year, regardless of changes in form of control. If the respondent for its own purposes uses more accurate methods than are provided below for computing the required averages, the more accurate figures should be given in the returns, and the method of computing each average should be indicated in a footnote. Train-miles, locomotives-miles, car-miles, motor car-miles, and other particulars are to be classified in accordance with the Uniform System of Accounts for Steam Railway Corporations. Particulars of electric operations not provided for in the form given below should be stated in a memorandum at the foot of the next page.

Instructions Regarding Various Items

The items designated hereunder by the numbers attached to them in the table.

1 includes road operated under trackage rights.

81 includes all freight the revenue from which is includible in account No. 101, "Freight."

82 includes only that nonrevenue freight which is hauled on transportation trains.

85 relates to the freight included in 82.

103 is the aggregate of revenue accounts Nos. 102 to 109, inclusive. (See page 302.)

111 = 13 ÷ 1.
112 = 14 ÷ 1.
113 = 15 ÷ 1.
114 = 16 ÷ 1.
115 = 17 ÷ 1.
116 = 18 ÷ 1.
117 = 41 ÷ 1.
118 = (55 + 61 + 62 + 63 + 69 + 70 + 71) ÷ 1.
119 = (60 + 64 + 65 + 66 + 67 + 72 + 73 + 74 + 75) ÷ 1.
120 = 101 ÷ 1.
121 = 103 ÷ 1.
122 = 104 ÷ 1.
123 = 105 ÷ 1.
124 = 106 ÷ 1.
125 = 84 ÷ 1.
126 = 86 ÷ 1.
127 = 92 ÷ 1.
131 = 51 ÷ 13.
132 = 61 ÷ 15.
133 = 52 ÷ 13.
134 = 62 ÷ 15.
135 = 84 ÷ (13 + 15).
136 = 86 ÷ (13 + 15).
137 = 60 ÷ 14.
138 = (64 + 65 + 66 + 67) ÷ 15.
139 = 92 ÷ (14 + 15).
140 = 101 ÷ (13 + 15).
141 = 103 ÷ (14 + 15).
142 = 104 ÷ 17.
143 = 105 ÷ 17.
144 = 106 ÷ 17.
151 = 13 ÷ 24.
152 = 55 ÷ 24.
153 = 14 ÷ 28.
154 = 60 ÷ 28.
155 = 15 ÷ 32.
156 = 68 ÷ 32.
157 = 16 ÷ 36.
158 = 76 ÷ 36.
161 = 84 ÷ (51 + 61).
162 = 86 ÷ (51 + 61).
163 = 101 ÷ (51 + 61).
171 = 92 ÷ (56 + 57 + 64 + 65.
172 = 102 ÷ (56 + 57 + 64 + 65).
181 = 84 ÷ 81.
182 = 85 ÷ 82.
183 = 86 ÷ 83.
184 = 92 ÷ 91.
185 = .101 ÷ 81.
186 = .101 ÷ 84.
187 = .102 ÷ 91.
188 = .102 ÷ 92.
189 = .105 ÷ 104.

Item No.	Item (a)		Amount (b)
1.	Average mileage of road operated†...(miles)		10,623.64
	Train-miles		
11.	Freight—ordinary		18,937,416
12.	" —light		625,189
13.	" —total		19,562,605
14.	Passenger	156,583	16,635,331
15.	Mixed		1,349,262
16.	Special		13,859
17.	Total transportation service		37,561,057
18.	Work service		1,540,765
	Locomotive-miles		
21.	Freight—principal	1,320,991	19,562,605
22.	" —helper	184,186	683,102
23.	" —light	125,706	923,719
24.	" —total		21,169,426
25.	Passenger—principal	895,741	16,478,748
26.	" —helper	11,442	173,853
27.	" —light	13,385	244,562
28.	" —total		16,897,163
29.	Mixed train—principal	32	1,349,262
30.	" " —helper		2,635
31.	" " —light		1,992
32.	" " —total		1,353,889
33.	Special—principal	28	13,859
34.	" —helper	28	878
35.	" —light		6
36.	" —total		14,743
37.	Train switching	16,324	1,909,560
38.	Yard switching—freight	172,837	9,940,916
39.	" " —passenger	228	713,874
40.	" " —total		10,654,790
41.	Total transportation service		51,999,571
42.	Work service	80,204	1,723,326
46.			
47.			
48.			
49.			
50.			

Item No.	Item (c)	Amount (d)
	Car-miles	
58.	Passenger train—dining	5,281,126
59.	" " —other 38	36,839,209
60.	" " —total	107,008,471
61.	Mixed train—freight—loaded	4,256,540
63.	" " — " —empty	2,282,846
63.	" " —caboose	40,689
64.	" " —passenger	1,915,277
65.	" " —sleeping, parlor, and observation	2,986
66.	" " —dining	202
67.	" " —other passenger-train	651,685
68.	" " —total	9,150,225
69.	Special train—freight—loaded	179,262
70.	" " — " —empty	1,426
71.	" " —caboose	13,193
72.	" " —passenger	46,868
73.	" " —sleeping, parlor, and observation	22,470
74.	" " —dining	1,047
75.	" " —other passenger-train	4,937
76.	" " —total	269,203
77.	Total transportation service	868,280,902
78.	Work service	15,012,829
	Freight Service	
81.	Tons—revenue freight	45,041,277
82.	" —nonrevenue freight	6,016,074
83.	" —total	51,057,351
84.	Ton-miles—revenue freight	11,384,600,804
85.	" " —nonrevenue freight	1,581,684,883
86.	" " —total	12,966,285,687
	Passenger Service	
91.	Passengers carried—revenue	15,919,202
92.	Passenger-miles—revenue	1,050,521,012
	Revenues and Expenses	
101.	Freight revenue†	117,183,815.31
102.	Passenger revenue†	31,033,594.19
103.	Passenger service train revenue†	45,455,445.82
104.	Operating revenue†	168,158,784.45

Item No.	Item (a)	Amount (b)
	Car-miles	
51.	Freight train—loaded	504,535,197
52.	" " —empty	227,213,229
53.	Sum of loaded and empty	731,748,426
54.	Freight train—caboose	20,104,577
55.	" " —total	751,853,003
56.	Passenger train—passenger 156,583	36,927,302
57.	" " —sleeping, parlor, and observation	27,960,834
104.	Operating revenues†	168,158,734.15
105.	" expenses†	164,697,120.98
106.	Net operating revenues†	3,461,613.17
	Averages per Mile of Road	
111.	Freight-train miles	1,841
112.	Passenger-train miles	1,566
113.	Mixed-train miles	127
114.	Special-train miles	1
115.	Transportation service train-miles	3,536
116.	Work-train miles	145
117.	Locomotive-miles—transportation	4,895

†Two decimal places required.

[Side Folios 365-368 Continued]

Steam Railway Corporations—Operating—A.

Item No.	Item (a)	Amount (b)
	Averages per Mile of Road—Continued	
118.	Freight service car-miles	71,409
119.	Passenger service car-miles	10,322
120.	Freight revenue†	11,030.48
121.	Passenger service train revenue†	4,278.71
122.	Operating revenues†	15,828.73
123.	" expenses†	15,502.89
124.	Net operating revenues†	325.84
125.	Ton-miles—revenue freight	1,071,629
126.	" —all freight	1,220,513
127.	Passenger-miles—revenue	98,885
	Averages per Train-mile	
131.	Loaded freight car-miles—freight trains†	25.79
132.	" " " " —mixed " †	3.15
133.	Empty " " " —freight " †	11.62
134.	" " " " —mixed " †	1.69
135.	Ton-miles—revenue freight†	544.41
136.	" —all freight†	620.04
137.	Passenger train car-miles—passenger trains†	6.43
138.	" " " " —mixed trains†	1.90
139.	Revenue passenger-miles†	58.41
140.	Freight revenue†	5.60
141.	Passenger service train revenue†	2.53
142.	Operating revenues†	4.48
143.	" expenses†	4.39
144.	Net operating revenues†	.09
	Averages per Locomotive-mile	
151.	Train-miles—freight trains†	.92
152.	Car-miles—freight trains†	35.52
153.	Train-miles—passenger trains†	.98
154.	Car-miles—passenger trains†	6.33
155.	Train-miles—mixed trains†	1.00
156.	Car-miles—mixed trains†	6.76
157.	Train-miles—special trains†	.94
158.	Car-miles—special trains†	18.26
	Averages per Loaded Freight Car-mile	
161.	Ton-miles—revenue freight†	22.38
162.	" —all freight†	25.48
163.	Freight revenue†	23,032
	Averages per Car-mile—Passenger	
171.	Passenger-miles—revenue†	15.72
172.	Passenger revenue†	46,453
	Miscellaneous Averages	
181.	Miles hauled—revenue freight†	252.76
182.	" " —nonrevenue freight†	262.91
183.	" " —all freight†	253.96
184.	Miles carried—revenue passengers†	65.99
185.	Revenue per ton of freight‡	2.60170
186.	" " ton-mile of freight‡	.01029
187.	" " passenger‡	1.94944
188.	" " passenger-mile‡	.02954
189.	Operating ratio‡	97.94

532. Switching and Terminal Traffic and Car Statistics

(For Switching and Terminal Companies Only)

Give particulars of cars handled during the year. With respect to the term "cars handled" it should be observed that, when applied to switching operations, the movement of a car from the point at which a switching company receives it, whether loaded or empty, to the point where it is loaded or unloaded, is to be counted as one car handled. The return of a car, whether loaded or empty, from the point where it is loaded or unloaded, to the point of delivery is to be counted as one car handled. No incidental movement is to be considered, unless such incidental movement involves the receipt of additional revenue. When applied to terminal operations, such as union station, bridge, ferry or other joint facility terminal operations, the term "cars handled" includes all cars for which facilities are furnished.

Item No.	Item (a)	Switching operations (b)	Terminal operations (c)	Total (d)
	Freight Traffic			
201.	Number of cars handled earning revenue—Loaded			
202.	Number of cars handled earning revenue—Empty			
203.	Number of cars handled at cost for tenant companies—Loaded			
204.	Number of cars handled at cost for tenant companies—Empty			
205.	Number of cars handled not earning revenue—Loaded			
206.	Number of cars handled not earning revenue—Empty			
207.	Total number of cars handled			
	Passenger Traffic			
208.	Number of cars handled earning revenue—Loaded			
209.	Number of cars handled earning revenue—Empty			
210.	Number of cars handled at cost for tenant companies—Loaded			
211.	Number of cars handled at cost for tenant companies—Empty			
212.	Number of cars handled not earning revenue—Loaded			
213.	Number of cars handled not earning revenue—Empty			
214.	Total number of cars handled			
215.	Total number of cars handled in revenue service (items 207 and 214)			
216.	Total number of cars handled in work service			

Not Applicable

Figures in short column on page 506 indicate the number of motor passenger train miles, electric locomotive miles and motor passenger train passenger car miles included in the several items.

†Two decimal places required. ‡Five decimal places required.

[fol. 369] G. N. EXHIBIT No. 1

Great Northern Railway Company, Accounting Department

Statement Showing Intrastate Movement of Log Shipments Made Within the State of Washington During Eight Months Ending August 31, 1920, Three Months Ending November 30, 1920, and One Month Ending December 31, 1920.

From—	To—	January to August, 1920, inclusive		September to November, 1920, inclusive		December, 1920	
		Cars	Tons	Cars	Tons	Cars	Tons
Birdsview	Anacortes	1,648	43,132	182	5,028	...	.....
Boyds	Arden	11	165	....	.....	...	.....
"	Spokane	9	318	....	.....	...	.....
Carnation	Snohomish	9	238	....	.....	...	.....
Clines	Spokane	731	26,024	295	8,042	...	.....
Concrete	Anacortes	2,080	53,659	1,364	33,600	133	3,322
Condons Spur	Hanley Spur	3	100	....	.....	...	.....
Darts	Spokane	2	73	1	25	...	.....
Deer Park Lbr. Co. Spur	"	48	1,571	11	370	33	1,109
Evans	Marcus	34	509	12	177	...	.....
Faber	Anacortes	143	3,571	....	.....	...	.....
Gays Spur	"	249	6,691	62	1,548	2	50
"	Minkler	58	6,818	....	.....	...	.....
"	Sedro-Wooley	38	1,540	12	699	...	.....
Gold Bar	Everett	3,737	95,062	1,722	43,007	221	5,519
High Rock	Snohomish	1,300	42,269	762	22,452	190	6,053
Holsten Spur	Marcus	1	12	....	.....	...	.....
Index	Everett	521	14,088	43	1,179	...	.....
"	Snohomish	147	4,772	....	.....	...	.....
Monroe	Seattle	1	25	....	.....	...	.....
"	Snohomish	25	688	7	207	...	.....
Napoleon	Spokane	9	312	54	1,967	...	.....
Nestos Spur	Anacortes	207	4,920	292	7,468	55	1,373
Orient	Deer Park	29	724	....	.....	...	.....
"	Marcus	13	417	....	.....	...	.....
Pine Spur	Spokane	.....	.....	....	.....	2	62
Pooles Spur	Deer Park	19	647	....	.....	...	.....
"	Hanley Spur	.....	.....	5	167	...	.....
"	Spokane	1	37	....	.....	...	.....
Sedro-Wooley	Anacortes	6	201	....	.....	...	.....
Springdale	Deer Park	1,696	41,428	245	6,096	...	.....
"	Spokane	39	1,111	41	1,105	...	.....
Sultan	Everett	96	2,586	....	.....	...	.....
Sultan Junction	"	2,536	68,952	....	.....	...	.....
Valley	Spokane	213	8,620	32	915	...	.....
Velvet	Hanley Spur	1	37	1	25	...	.....
"	Spokane	2	88	....	.....	...	.....
Williams	Arden	42	1,399	....	.....	...	.....
Total		15,704	432,804	5,143	134,077	636	17,488

Office of Auditor Freight Receipts, June 21, 1921. S-853.

[fols. 370 & 371] G. N. Ex. No. 2

Great Northern Railway Company, Accounting Department

Statement Showing Number of Carloads of Logs Handled in State of Washington by Mixed Freight Trains and Log Trains for the Months of May, September, and December, 1920

	May, 1920		Sept., 1920		Dec., 1920	
	Mixed freight trains	Log trains	Mixed freight trains	Log trains	Mixed freight trains	Log trains
Spokane Div.	...	....	...	...	...	...
Marcus "	239	....	144	...	...	...
Cascade "	360	2,001	669	981	318	200
Total	599	2,001	813	981	318	200

Office of Accountant Train Statistics, March 26, 1921.

[fol. 372 & 373]

G. N. Exhibit No. 4

Great Northern Railway Company

Mileage

Spokane Division

	September, 1920		October, 1920		November, 1920	
	Main line	Branch line	Main line	Branch line	Main line	Branch line
#Freight train miles	58,168	8,942	79,865	11,927	53,194	7,360
#Freight engine miles	68,169	8,942	96,669	12,064	63,900	7,319
Freight car miles—Loaded	1,607,084	81,646	2,139,543	136,662	1,467,094	72,914
Freight car miles—Empty	970,328	79,624	1,048,409	74,150	446,929	37,261
Gross ton miles	142,695,013	5,399,080	120,528,819	8,049,286	77,105,982	4,235,299
Net ton miles	62,501,642	1,612,112	52,745,765	2,840,396	36,859,579	1,609,100

Marcus Division

	September, 1920		October, 1920		November, 1920	
	Main line	Branch line	Main line	Branch line	Main line	Branch line
#Freight train miles	.....	16,219	.....	17,935	.....	16,950
#Freight engine miles	.....	16,387	.....	18,171	.....	17,162
Freight car miles—Loaded	.....	208,986	.....	238,246	.....	219,924
Freight car miles—Empty	.....	93,033	.....	95,425	.....	82,811
Gross ton miles	.....	12,624,859	.....	14,018,319	.....	13,051,450
Net ton miles	.....	6,038,808	.....	6,712,125	.....	6,466,811

Cascade Division

	September, 1920		October, 1920		November, 1920	
	Main line	Branch line	Main line	Branch line	Main line	Branch line
#Freight train miles	34,777	14,130	35,234	14,742	28,566	13,510
#Freight engine miles	55,006	14,191	56,995	14,742	43,368	13,711
Freight car miles—Loaded	967,884	254,922	968,054	235,043	663,018	205,155
Freight car miles—Empty	482,367	160,232	510,500	171,918	342,783	151,834
Gross ton miles	53,910,390	14,390,467	58,498,201	12,192,538	40,217,625	10,721,640
Net ton miles	23,686,507	6,402,287	25,761,260	5,854,779	18,491,627	4,876,939

Totals by Months

	September	October	November	Grand total
Freight train miles	132,236	159,703	119,580	411,519
Freight engine miles	162,695	198,641	145,460	506,796
Freight car miles—Loaded	3,120,522	3,717,548	2,628,105	9,466,175
Freight car miles—Empty	1,785,584	1,900,402	1,061,618	4,747,604
Gross ton miles	229,019,809	213,287,163	145,331,996	587,638,968
Net ton miles	100,241,356	93,914,325	68,304,056	262,459,737

Accounting Department, Disbursements Division, April 2, 1921.

#Includes 75% of mixed service.

Method #2

Basing Costs Upon Cost per M Gross Ton Miles of Revenue Freight Only, Which Gives the Same Cost of Logging

Ratio of Gross Ton Miles all Freight to Gross Ton Miles of Revenue Freight	1.165
Gross Ton Miles Revenue and Non Revenue as shown on Revised Exhibit 4	1,772,600,093
Gross Ton Miles Revenue Frt. only $= \frac{1,772,600,093}{1.165} =$	1,521,545,144
Cost per M Gross Ton Miles of Revenue Freight $= \frac{10,821,922}{1,521,545}$	$7.1124
Cost of operation Log Traffic is 117,031,358 x 7.1124.	$832,373
Gross Revenue from Logs as shown by Mr. Gray....	1,032,357
Net Revenue from Logs	$199,984

(Here follow C., M. & St. P. Exhibit No. 30, marked side folio pages 326-368, inc., and G. N. Exhibits Nos. 1, 2, and 4, marked side folio pages 369-373, inc.)

[fol. 374] G. N. Exhibit No. 6

Great Northern Railway Company, Accounting Department

Statement Showing Washington Intrastate Traffic on Logs, Eight Months Ending August 31, 1920, Three Months Ending November 30, 1920, and One Month Ending December 31, 1920

	January to August, 1920, inclusive	September to November, 1920, inclusive	December, 1920
Number of Cars	15,704	5,143	636
Tons	432,804	134,077	17,488
Ton Miles	13,547,003	4,543,598	569,224
Revenue	$221,173.51	$86,922.13	$10,393.66
Car Miles	490,525	176,480	20,964
Average Haul per car	31.24	34.31	32.96
Average Rate per ton mile—cents	1.633	1.913	1.826
Average Revenue per car	$14.08	$16.90	$16.34
Average Rate per car mile	$.451	$.493	$.496

Office of Auditor Freight Receipts, June 21, 1921. S-852.

[fol. 375] G. N. Exhibit No. 7

Great Northern Railway Company

Cost of Repairs to Logging Flats at Our Everett, Wash. and Hillyard, Wash., Shops for One Year, Aug. 1st, 1919, to July 31st, 1920

Log flats—Repairs, $30,131.70.

All other Frt. equip.—Entire Line, $8,855,406.40.

Loaded Mileage, 1920, 687,969.

Other Loaded mileage—Entire Line, 340,598,813.

Average loaded miles per car year, 5,642.

Average cost of repairs per loaded car mile, .03824.

Average cost of other repairs per loaded car mile, entire line, .02012.

Note.—The repair cost figures as shown do not reflect increases effective May 1st, 1920 as allowed by Decision No. 2.

Mileage and repair costs for cars other than logging flats is shown for the entire line for the reason that our Hillyard Shops located in Eastern Washington serves territory extending over most of Montana. Log flat mileage shown was all made in Washington.

Repair costs incurred on log cars at our small repair points in Wash. and also for light repairs as made by trainmen enroute are not included in the above figures.

Accounting Department, Disbursement Division, April 2, 1921.

[fol. 376] Great Northern Railway Company, State of Washington

Note 1.—The figures entered on attached statement as "Gross Receipts from Interstate business accruing to the State of Washington divided on Straight Mileage Basis" have been compiled upon that basis in accordance with the order of the Railroad commission and are given under protest, for the reason that this company claims that basis does not truthfully reflect the amount earned in the State of Washington.

Note 2.—The operations of the company within the State of Oregon have been included with those in Washington in the figures shown on attached statement. The authority for so doing is a letter dated December 16th, 1910 to "Mr. F. V. Brown, Attorney for the Great Northern Ry. Co. at Seattle, Wash." and signed by the "Railroad Commission of Washington by J. C. Lawrence, member of the commission."

The Great Northern Railway Co. owns no physical property in the State of Oregon and the mileage operated in that state is very small,

Great Northern Railway Company, State of Washington

310. Railway Operating Revenue

(For Companies Making Operating Reports)

Calendar Year 1920

State the railway operating revenues of the respondent for the year (classified in accordance with the Uniform System of Accounts for Steam Railway Corporations), and the comparison of such revenues with those of the preceding year (showing increases in black and decrease in red) for each of the several classes. The proportion of joint traffic receipts belonging to other carriers should not be included in column (b).

Class of railway operating revenue (a)	Total amount of revenue for the year (b)	Comparison with total revenue of preceding year (increases in black, decreases in red) (c)	Revenues earned within the state (include Oregon)		
			On intrastate traffic (d)	On interstate traffic (e)	Total (f)
				*$12,926.00	*$12,926.00
(101) Freight	$80,760,845.24	$12,409,373.17	$3,631,875.00	6,544,201.20	10,176,076.20
			11.46	*73,957.85	*73,969.31
(102) Passenger	20,551,025.20	927,166.11	2,868,243.36	2,286,985.91	5,155,229.07
				*577.17	*577.17
(103) Excess baggage	162,720.95	11,495.14	22,633.94	18,046.79	40,680.73
				*2,138.76	*2,138.76
(104) Sleeping car	1,112,882.40	150,039.71	125,237.94	105,193.26	230,431.20
				*2,169.75	*2,169.75
(105) Parlor and chair car	127,816.63	27,725.19	23,503.73	1,740.93	75,244.66
				*3,787.30	*3,787.30
(106) Mail	5,477,767.35	3,554,546.43	.....	1,023,314.29	1,023,314.29
					*3,966.81
(107) Express	2,998,461.08	643,786.15	Cannot state.	.....	558,252.84
				*58.78	*58.78
(108) Other passenger-train	16,562.23	1,043.32	2,230.47	1,841.49	4,071.96
(109) Milk	35.82	†6,968.04	.....	.....	.....
					*1,003.03
(110) Switching	766,741.04	72,089.70	Cannot state.	.....	162,043.11
(111) Special service train	33,514.47	†9,204.36	1,283.27	5,119.84	6,403.11
(112) Other Freight-train	Dr. 327.82	†1,505.27	.....	.....	.....
Total rail-line transportation revenue	121,008,044.59	17,781,587.26	.....	.....	*100,596.91
					17,431,747.17
(131) Dining and buffet	873,464.53	143,472.62	.....	.....	*5,080.67
			Cannot state.	.....	285,298.05
(132) Hotel and restaurant	709,101.03	68,797.70	178,982.33	.....	178,982.53
(133) Station, train, and boat privileges	8,093.37	1,407.71	Cannot state.	.....	507.29
(134) Parcel room	62,135.20	582.00	21,389.65	.....	21,389.65
					*266.04
(135) Storage—Freight	570,401.04	†102,864.22	Cannot state.	.....	[107.61]‡
					*21.94
(136) Storage—Baggage	43,866.33	1,555.13	Cannot state.	.....	15,743.53
					*373.00
(137) Demurrage	323,533.98	44,128.70	Cannot state.	.....	54,461.42
(138) Telegraph and telephone	156,083.23	23,731.70	" "	.....	26,517.75
(142) Rents of buildings and other property	142,553.40	†6,912.31	12,437.43	.....	12,437.43
					*1,675.92
(143) Miscellaneous	999,242.99	399,971.60	Cannot state.	.....	372,651.84
					*7,417.57
Total incidental operating revenue	3,888,475.12	573,870.63	.....	.....	967,881.88
					*53.35
(151) Joint facility—Cr.	65,328.37	14,962.26	Cannot state	.....	789.19
(152) Joint facility—Dr.	Dr. 63,982.87	†6,293.92	" "	.....	[58.25]‡
					*53.33
Total joint facility operating revenue	1,343.50	8,668.34	.....	.....	730.94
					*108,067.83
Total railway operating revenues	124,897,865.21	18,364,126.23	.....	.....	18,400,359.99
Total					$18,508,427.82

50. State the rule or rules used by the respondent in assigning revenues from interstate traffic to the several States in which such traffic moves. See note attached.

being but 9.89 miles, all trackage over the lines of other companies. The Great Northern Ry. Co. does almost no local business in Oregon, the entire traffic within that State being inter-state and the Oregon proportion of the revenue from such interstate traffic would be small. On the other hand the expenses in the State of Oregon are large on account of the terminals in Portland. In order that the expense might be charged against the revenue from interstate traffic earned by such disbursements, application was made to the Railroad Commission of the State of Washington, for permission to include the operations in Oregon with those in Washington, which request was acted upon and granted as indicated above.

(Here follows G. N. Exhibit No. 8, marked side folio page 377.)

[fol. 378] G. N. Exhibit No. 9

Great Northern Railway Company, State of Washington

320A. Railway Operating Expenses, Class 1 Companies, Within the State

Calendar Year 1920

(For Companies Having Annual Operating Revenues Above $1,000,000)

State the railway operating expenses on respondent's road regardless of changes in form of control for the year, classifying them in accordance with the Uniform System of Accounts for Steam Railway Corporations, and analyzing them in accordance with the Commission's Rules of Governing the Separation of Operating Expenses, effective on January 1, 1920. The returns against "Yard" in accounts Nos. 202-226 should be those applying to tracks in yards where a separate switching service is maintained, as provided for by instructions pertaining to those accounts in the effective Rules.

I. Maintenance of way and structures:

	Name of railway operating expense account (a)	(Includes Oregon) amount of operating expenses for the year (b)
(208)	Superintendence	$246,135.76
(202)	Roadway maintenance—Yard	40,701.31
	Roadway maintenance—Other	482,995.15
(206)	Tunnels and subways—Other	5,293.15
(208)	Bridges, trestles, and culverts—Yard	7,183.26
	Bridges, treatles, and culverts—Other	528,508.79
(212)	Ties—Yard	32,582.29
	Ties—Other	301,528.87
(214)	Rails—Yard	1,610.84
	Rails—Other	80,386.69
(216)	Other track material—Yard	7,492.11
	Other track material—Other	151,954.98

Name of railway operating expense account (a)	(Includes Oregon) amount of operating expenses for the year (b)
(218) Ballast—Yard	17.49
Ballast—Other	25,767.29
(220) Track laying and surfacing—Yard	102,989.49
Track laying and surfacing—Other	1,197,855.29
(221) Right-of-way fences—Yard	27.81
Right-of-way fences—Other	10,589.56
(223) Snow and sand fences and snow sheds—Other	119,349.93
(225) Crossings and signs—Yard	1,091.33
Crossings and signs—Other	49,286.61
(227) Station and office buildings	150,975.61
(229) Roadway buildings	35,128.90
(231) Water stations	65,663.67
(233) Fuel stations	36,922.84
(235) Shops and engine houses	81,906.21
(241) Wharves and docks	133,460.47
(247) Telegraph and telephone lines	84,454.22
(249) Signals and interlockers	71,329.00
(251) Power plant dams, canals, and pipe lines	324.28
(253) Power plant buildings	556.91
(255) Power substation buildings	4.30
(257) Power transmission systems	17,137.45
(259) Power distribution systems	4,006.55
(261) Power line poles and fixtures	419.86
(265) Miscellaneous structures	2,504.94
(267) Paving	42.58
(269) Roadway machines	11,262.84
(271) Small tools and supplies	50,110.41
(272) Removing snow, ice and sand	41,804.34
(273) Assessments for public improvements	6,168.05
(274) Injuries to persons	26,509.59
(275) Insurance	59,454.00
(276) Stationery and printing	5,022.35
(277) Other expenses	21,587.63
Total of accounts Nos. 201 to 277	$4,300,109.00
(278) Maintaining joint tracks, yards, and other facilities—Dr.	280,796.06
(279) Maintaining joint tracks, yards, and other facilities—Cr.	25,787.82*
Total maintenance of way and structures	$4,555,113.24

[*Red in copy.[

[fol. 379] II. Maintenance of equipment:

Name of railway operating expense account (a)	(Includes Oregon) amount of operating expenses for the year (b)
(301) Superintendence	$139,232.04
(302) Shop machinery	46,592.66
(304) Power plant machinery	5,060.30
(308) Steam locomotives—Repairs	1,543,686.38
(309) Steam locomotives—Depreciation	88,973.54
(310) Steam locomotives—Retirements	1,197.23*
(311) Other locomotives—Repairs	31,559.02
(312) Other locomotives—Depreciation	3,219.96
(314) Freight-train cars—Repairs	1,240,520.42
(315) Freight-train cars—Depreciation	98,599.31
(316) Freight-train cars—Retirements	18,706.70*
(317) Passenger-train cars—Repairs	429,833.77
(318) Passenger-train cars—Depreciation	35,211.14
(319) Passenger-train cars—Retirements	1,065.31*
(326) Work equipment—Repairs	71,713.07
(327) Work equipment—Depreciation	6,271.72
(328) Work equipment—Retirements	3,838.60*
(332) Injuries to persons	15,490.07
(333) Insurance	19,070.60
(334) Stationery and printing	3,635.53
(335) Other expenses	891.74
Total of accounts Nos. 301 *and* 335	3,754,752.63
(336) Maintaining joint equipment at terminals—Dr.	12,356.24
(337) Maintaining joint equipment at terminals—Cr.	10,213.24*
Total maintenance of equipment	3,756,895.43

III. Traffic:

(351) Superintendence	48,492.34
(352) Outside agencies	76,503.43
(353) Advertising	15,925.73
(354) Traffic associations	2,937.02
(356) Industrial and immigration bureaus	9,073.76
(357) Insurance	112.46
(358) Stationery and printing	20,806.89
(359) Other expenses	855.33
Total of accounts Nos. 351 to 359	174,706.96

[*Red in copy.]

IV. Transportation—Rail line:

Name of railway operating expense account (a)	(Includes Oregon) amount of operating expenses for the year (b)
(371) Superintendence	218,848.94
(372) Dispatching trains	149,409.77
(373) Station employees	1,326,429.19
(374) Weighing, inspection, and demurrage bureaus	8,931.40
(376) Station supplies and expenses	71,111.40
(377) Yardmasters and yard clerks	220,649.49
(378) Yard conductors and brakemen	363,259.06
(379) Yard switch and signal tenders	9,313.30
(380) Yard enginemen	241,707.72
(382) Fuel for yard locomotives	455,089.22
(385) Water for yard locomotives	7,760.84
(386) Lubricants for yard locomotives	3,683.82
(387) Other supplies for yard locomotives	3,738.14
Carried forward	3,081,932.29
[fol. 380] Transportation—Rail line—Brought Forward	$3,081,932.29
(388) Enginehouse expenses—Yard	71,476.98
(389) Yard supplies and expenses	7,301.64
(392) Train enginemen	891,368.69
(393) Train motormen	35,814.00
(394) Fuel for train locomotives	3,050,355.28
(395) Train power produced	22,795.92
(397) Water for train locomotives	49,691.93
(398) Lubricants for train locomotives	15,491.21
(399) Other supplies for train locomotives	23,573.61
(400) Enginehouse expenses—Train	347,953.49
(401) Trainmen	1,032,878.51
(402) Train supplies and expenses	317,031.71
(403) Operating sleeping cars	79,381.74
(404) Signal and interlocker operation	47,845.56
(405) Crossing protection	15,545.46
(406) Drawbridge operation	12,942.64
(407) Telegraph and telephone operation	102,996.57
(410) Stationery and printing	37,531.83
(411) Other expenses	14,499.37
(414) Insurance	39,343.21
(415) Clearing wrecks	50,758.11
(416) Damage to property	33,696.46
(411) Damage to live stock on right of way	48,628.28
(418) Loss and damage—Freight	335,164.83
(419) Loss and damage—Baggage	1,341.41
(420) Injuries to persons	245,574.45
Total of accounts Nos. 371 to 389, 392 to 411, and 414 to 420	10,012,915.28

Name of railway operating expense account (a)	(Includes Oregon) amount of operating expenses for the year (b)
(390) Operating joint yards and terminals—Dr...	167,206.50
(391) Operating joint yards and terminals—Cr...	88,094.50*
(412) Operating joint tracks and facilities—Dr...	94,602.85
(413) Operating joint tracks and facilities—Cr...	21,530.08*
Total transportation—Rail line	10,165,100.05
VI. Miscellaneous operations:	
(441) Dining and buffet service	300,527.66
(442) Hotels and restaurants	167,477.73
(446) Other miscellaneous operations	138,218.23
Total miscellaneous operations	606,023.62
VII. General:	
(451) Salaries and expenses of general officers...	45,420.30
(452) Salaries and expenses of clerks and attendants	271,451.68
(453) General office supplies and expenses	8,336.26
(454) Law expenses	48,099.78
(455) Insurance	290.91
(457) Pensions	5,641.16
(458) Stationery and printing	18,016.95
(459) Valuation expenses	32,816.89
(460) Other expenses	8,372.22
Total of accounts Nos. 451 to 460 ...	438,445.65
(461) General joint facilities—Dr.	4,412.57
(462) General joint facilities—Cr.	452.47*
Total general expenses	442,403.75
VIII. Transportation for investment—Cr.	29,016.66*
Grand total railway operating expenses	19,671,228.39

NOTE.—The respondent has not shown the separation of operating expenses between freight and passenger as called for by this schedule for the reason that its accounts were not so kept for the year covered by this report.

Operating ratio (ratio of operating expenses to operating revenues 106.28 per cent.

[*Red in copy.]

[fol. 381] G. N. EXHIBIT No. 10

Great Northern Railway Company, State of Washington

5318. Statistics of Rail Line Operations Within the State

(For Companies Making Operating Reports)

Calendar Year 1920

Give the various statistical items called for concerning the rail-line operations of respondent's road during the year, regardless of changes in form of control. If the respondent for its own purpose uses more accurate methods than are provided below for computing the required averages, the more accurate figures should be given in the returns, and the method of computing each average should be indicated in a footnote. Train-miles, locomotive-miles, car-miles, motor car-miles, and other particulars are to be classified in accordance with the Uniform System of Accounts for Steam Railway Corporations.

Item No.	Item	Includes Oregon, amount
1.	Average mileage of road operated (miles), Oregon	9.89
	Average mileage of road operated (miles), Wash.	1,199.65
	Total	1,209.54
	Train-miles:	
11.	Freight—ordinary	1,396,261
12.	" —light	26,112
13.	" —total	1,418,373
14.	Passenger	2,067,666
15.	Mixed	84,795
16.	Special	1,755
17.	Total transportation service	3,572,589
18.	Work service	317,361
	Locomotive miles:	
21.	Freight—principal	1,418,373
22.	" —helper	196,925
23.	" —light	189,483
24.	" —total	1,804,781

Item No.	Item	Includes Oregon, amount
25.	Passenger—principal	2,067,666
26.	" —helper	96,936
27.	" —light	140,202
28.	" —total	2,304,804
29.	Mixed train—principal	84,799
30.	" " —helper	37
31.	" " —light	532
32.	" " —total	85,368
33.	Special—principal	1,755
34.	" —helper	133
35.	" —light	329
36.	" —total	2,217
37.	Train switching	264,678
38.	Yard switching—freight	839,651
39.	" " —passenger	57,878
40.	" " —total	897,529
41.	Total transportation service	5,339,373
42.	Work service	319,486
	Car-miles:	
51.	Freight train—loaded	35,211,192
52.	" " —empty	15,331,793
53.	Sum of loaded and empty	50,542,985
54.	Freight train—caboose	1,453,496
55	" " —total	51,996,481
56.	Passenger train—passenger	4,335,525
57.	" " —sleeping, parlor, and observation	3,493,476
58.	" " —dining	1,039,567
59.	" " —other	5,050,829
60.	" " —total	13,919,397

Item No.	Item	Includes Oregon, amount
61.	Mixed train—freight—loaded	205,621
62.	" " — " —empty	101,613
63.	" " —caboose	385
64.	" " —passenger	104,188
65.	" " —sleeping, parlor, and observation	5,761
67.	" " —other passenger-train	53,283
68.	" " —total	470,851
69.	Special train—freight—loaded	27,095
71.	" " —caboose	1,464
72.	" " —passenger	12,275
73.	" " —other passenger-train	848
76.	" " —total	41,682
77.	Total transportation service	66,428,411
78.	Work service	1,051,722
	Freight service:	
81.	Tons—revenue freight	5,110,468
82.	" —nonrevenue freight	Not compiled
84.	Ton-miles—revenue freight	819,418,933
85.	" " —non-revenue freight	110,655,379
86.	" " —total	930,074,312
	Passenger service:	
91.	Passengers carried—revenue	2,244,544
92.	Passenger-miles—revenue	168,517,936
	Revenues and expenses:	
101.	Freight revenue	10,189,002.70
102.	Passenger revenue	5,229,198.38
103.	Passenger service train revenue	7,193,892.63
104.	Operating revenues	18,508,228.39
105.	Operating expenses	19,671,228.39
106.	Net operating revenues	[1,162,800.57]*
	Averages per mile of road:	
111.	Freight-train miles	1,175
112.	Passenger-train miles	1,709
113.	Mixed-train miles	70

[*Red in copy.]

Item No.	Item	Includes Oregon, amount
114.	Special-train miles	1
115.	Transportation service train-miles	2,936
116.	Work-train miles	262
117.	Locomotive-miles—transportation	4,431
[fol. 382]		
118.	Freight service car-miles	43,267
119.	Passenger service car-miles	11,656
120.	Freight revenue	$8,423.57
121.	Passenger service train revenue	5,931.69
122.	Operating revenues	15,302.04
123.	Operating expenses	16,263.40
124.	Net operating revenues	[961.36]*
125.	Ton-miles—revenue freight	677,463
126.	Ton-miles—all freight	768,949
127.	Passenger-miles—revenue	139,324
	Averages per train-mile:	
131.	Loaded freight car miles—freight trains	24.83
132.	" " " " —mixed "	2.43
133.	Empty " " " —freight "	10.81
134.	" " " " —mixed "	1.20
135.	Ton-miles—revenue freight	543.13
136.	" —all freight	618.74
137.	Passenger train car-miles—passenger trains	6.73
138.	" " " —mixed trains	1.93
139.	Revenue passenger-miles	78.29
140.	Freight revenue	6.78
141.	Passenger service train revenue	3.33
142.	Operating revenues	5.12
143.	" expenses	5.31
144.	Net operating revenues	[.33]*
	Average per locomotive mile:	
151.	Train-miles—freight trains	.79
152.	Car-miles—freight trains	28.83
153.	Train-miles—passenger trains	.90
154.	Car-miles—passenger trains	6.04
155.	Train-miles—mixed trains	.99
156.	Car-miles—mixed trains	5.59
157.	Train-miles—special trains	.79
158.	Car-miles—special trains	18.80

[*Red in copy.]

Item No.	Item	Includes Oregon, amount
	Averages per loaded freight car mile:	
161.	Ton-miles—revenue freight	23.14
162.	" —all freight	26.26
163.	Freight revenue	287.69
	Averages per car-mile—passenger:	
171.	Passenger-miles—revenue	21.23
172.	Passenger revenue	638.68
	Miscellaneous averages:	
181.	Miles hauled—revenue freight	160.34
182.	" " —nonrevenue freight	Not compiled.
183.	" " —all freight	Not compiled.
184.	Miles carried—revenue passengers	75.08
185.	Revenue per ton of freight	1.94375
186.	" " ton-mile of freight	.01202
187.	" " passenger	2.32974
188.	" " passenger-mile	.01303
189.	Operating ratio	106.28

G. N. Exhibit No. 11

Great Northern Railway Company, State of Washington

541. Revenue Freight Carried During the Year

Calendar Year 1920

Commodity (a)	Total revenue freight carried, entire line		Revenue freight originating on respondent's road within the State	
	No. of carloads (b)	No. of tons (2,000 lbs.) (c)	No. of carloads (d)	No. of tons (2,000 lbs.) (e)
Products of Agriculture:				
1. Wheat	47,291	1,928,737	2,208	87,517
2. Corn	6,942	230,165	79	3,128
3. Oats	7,885	269,611	546	17,855
4. Other grain	12,164	472,619	99	3,341
5. Flour and meal	13,314	446,773	1,363	49,011
6. Other mill products	6,244	185,161	1,225	35,155
7. Hay, straw, and alfalfa	26,159	342,796	2,891	39,775
8. Tobacco	73	1,391	.....	.....
9. Cotton	724	12,609	.....	.....
10. Cotton seed and products, except oil	216	5,191	.....	.....
11. Citrus fruits	579	10,007	11	187
12. Other fresh fruits	14,976	272,936	12,171	224,257
13. Potatoes	14,934	288,074	554	10,654
14. Other fresh vegetables	1,052	18,060	349	5,656
15. Dried fruits and vegetables	413	9,029	160	3,115
16. Other products of agriculture	4,442	149,858	260	6,358
Total	156,508	4,642,467	21,918	486,019

541. Revenue Freight Carried During the Year—Continued

Commodity (a)	Total revenue freight carried, entire line		Revenue freight originating on respondent's road within the State	
	No. of carloads (b)	No. of tons (2,000 lbs.) (c)	No. of carloads (d)	No. of tons (2,000 lbs.) (e)
Products of Animals:				
17. Horses and mules	1,957	22,685	108	1,292
18. Cattle and calves	19,655	229,693	955	11,887
19. Sheep and goats	3,825	40,072	790	8,945
20. Hogs	11,690	111,883	102	1,065
21. Fresh meats	1,290	17,710	292	3,878
22. Other packing-house products	617	12,267	136	2,255
23. Poultry	172	2,073	1	15
24. Eggs	484	5,837	19	363
25. Butter and cheese	499	6,214	41	690
26. Wool	253	4,373	38	791
27. Hides and leather	384	7,262	75	1,292
28. Other products of animals	1,026	25,679	293	8,696
Total	41,852	485,728	2,850	41,149
Products of Mines:				
29. Anthracite coal	24,710	741,331	5	148
30. Bituminous coal	85,668	2,966,865	3,291	119,073
31. Coke	4,135	136,071	62	1,690
32. Iron ore	299,471	14,755,241	22	879

33. Other ores and concentrates	11,099	508,851	803	32,632
34. Base bullion and matte	795	38,179	331	15,719
35. Clay, gravel, sand, and stone	19,737	884,055	5,123	240,310
36. Crude petroleum	2,246	79,794	13	445
37. Asphaltum	146	4,885	8	236
38. Salt	1,532	39,608	42	987
39. Other products of mines	562	20,848	20	401
Total	450,099	20,175,678	9,720	412,520

[fol. 384]

Products of Forests:

40. Logs, posts, poles, and cordwood	47,467	1,527,935	27,877	918,578
41. Ties	1,819	58,255	353	14,024
42. Pulp wood	3,390	124,851	68	1,977
43. Lumber, timber, box shooks, staves, and headings	73,784	2,068,984	24,020	663,506
44. Other products of forests	1,148	24,110	88	2,304
Total	127,608	3,804,135	52,406	1,600,389

541. Revenue Freight Carried During the Year—Continued

Commodity (a)	Total revenue freight carried, entire line		Revenue freight originating on respondent's road within the State	
	No. of carloads (b)	No. of tons (2,000 lbs.) (c)	No. of carloads (d)	No. of tons (2,000 lbs.) (e)
Manufactures and Miscellaneous:				
45. Refined petroleum and its products	23,352	630,288	1,262	47,410
46. Vegetable oils	520	15,633	293	9,108
47. Sugar, Sirup, glucose, and molasses	2,961	56,261	60	1,890
48. Boats and vessel supplies	22	220	2	18
49. Iron, pig and bloom	1,201	33,653	114	2,904
50. Rails and fastenings	1,555	37,330	209	4,075
51. Bar and sheet iron, structural iron, and iron pipe	5,810	203,359	277	10,030
52. Other metals, pig, bar, and sheet	3,176	130,136	100	4,042
53. Castings, machinery and boilers	4,280	87,479	1,149	28,935
54. Cement	10,788	395,083	4,143	159,383
55. Brick and artificial stone	4,387	149,977	750	27,951
56. Lime and plaster	1,931	59,770	217	6,762
57. Sewer pipe and drain tile	2,812	59,776	153	3,260
58. Agricultural implements and vehicles other than automobiles	7,076	96,789	107	1,817
59. Automobiles and autotrucks	8,447	57,897	714	5,410
60. Household goods and secondhand furniture	8,599	107,258	465	5,129
61. Furniture (new)	567	6,225	73	936
62. Beverages	1,186	21,355	60	1,199
63. Ice	1,512	46,286	54	1,132

64. Fertilizers (all kinds)	499	17,773	145	3,758
65. Paper, printed matter, and books	2,070	52,738	170	4,139
66. Chemicals and explosives	845	33,664	237	9,856
67. Textiles	159	4,285	26	651
68. Canned goods (all canned food products)	2,743	82,671	1,720	57,495
69. Other manufactures and miscellaneous	26,432	554,210	3,633	68,772
Total	122,930	2,940,116	16,133	466,062
Grand Total, Carload Traffic	898,997	32,048,624	103,027	3,006,139
70. Merchandise—All L. C. L. freight	.....	899,668	.....	132,646
Grand Total, Carload and L. C. L. Traffic	898,997	32,948,292	103,027	3,138,785

[fol. 385] G. N. EXHIBIT No. 12

Great Northern Railway Company, Accounting Department

Statement Showing Number of Loaded Cars, Number of Loaded Car Miles, Total Net Tons, and Total Revenue from Intrastate Log Shipments in Washington During the Following Periods

	Calendar year 1919	Period 1-1-20 to 8-31-20, inclusive	Period 9-1-20 to 12-31-20, inclusive
Loaded Cars	14,971	15,704	5,799
Loaded Car Miles	437,773	490,525	197,444
Net Tons	394,359	432,804	151,565
Revenue	$187,260.71	$221,173.51	$97,315.79

NOTE.—No interstate log shipments on our line in Washington during the above periods.

Office of Auditor Freight Receipts, June 21, 1921. S-851.

[fol. 385½] G. N. EXHIBIT No. 13

Great Northern Railway Company, Accounting Department

Statement Showing Total Ton Miles Within the State of Washington During Calendar Years 1919 and 1920 Subdivided Between Intrastate and Interstate and Percentages of Each

	Calendar year			
	1919		1920	
Intrastate ton miles	135,035,335	15%	150,441,328	18%
Interstate ton miles	776,952,673	85%	668,510,918	82%
Total	911,988,008		818,952,246	

(All Revenue Traffic.)

Office of Auditor Freight Receipts, June 10, 1921. S-849.

[fols. 386 & 387] G. N. EXHIBIT No. 15

Great Northern Railway Company

Operating Statistics Covering Intrastate Log Movements in the State of Washington Compared With All Freight Traffic, Month of July, 1920

	Log service in Washington	All freight service
1. #Number of carloads	1,376	95,175
2. #Total net tons	35,304	3,796,815
3. Loaded car miles	48,613	26,779,000
4. Empty car miles	48,613	13,893,000
5. Total car miles	97,226	40,672,000
6. Number of cars available for service	581	46,322
7. Average haul—miles (3÷1)	35.3	281.4
8. Per cent empty to loaded car miles (4÷3)	100.00	51.88
9. Average car load—tons (2÷1)	25.7	39.9
10. Average miles per car day (5÷6x31)	5.4	28.3

Office of Statistician, June 17, 1921.

#Excludes less than car load movements.

[fols. 388-390]

G. N. EXHIBIT No. 17

Great Northern Railway Company

Adjusted Value of Property in State of Washington Based on Railroad Commission's Valuation of June 30, 1908

	Electric locomotives	Steam locomotives	Freight cars	Passenger cars	Work equipment
Net addition to equipment 6/30/08 to 12/31/20	$181,000.76	$13,597,323.90	$18,960,419.81	$4,015,775.36	$2,317,466.82
Per cent applying to Washington—car or locomotive mile basis year 1920	100.00	16.68958	10.31209	18.94404	14.97548
Amount applying to Washington	181,000.76	2,269,336.10	1,955,215.57	760,750.10	347,051.78
Net additions—fixed property, State of Washington, from 6/30/08 to 12/31/20		$17,811,519.25			
Net additions—equipment—State of Washington from 6/30/08 to 12/31/20:					
Electric locomotives		181,000.76			
Steam locomotives		2,269,336.10			
Freight cars		1,955,215.57			
Passenger cars		760,750.10			
Work equipment		347,051.78			
Net additions, all property from 6/30/08 to 12/31/20, State of Washington		$23,324,873.56			
Amount established by the Railroad Commission of Washington as of June 30, 1908		59,577,212.00			
Adjusted value as of December 31, 1920		$82,902,085.56			

[fol. 391]

G. N. Exhibit No. 20

Delta Shops, June 25, 1921.

Statement Showing Cost of Applying Side Sills and Decking to Log Flats for a Period of Fifty-two Days

Material

Quantity	Description	Price	Detailed amount	Total amount
15	Side sills 43 ft. at	$11.75 ea.	$176.25	
70	pcs. Decking 13/4 x 71/4 x 8' 9"	25.00 m.	21.00	
44	" Decking 13/4 x 91/4 x 8' 9"	25.00 m.	16.50	
150	lbs. Nails 20D	4.00 cwt.	6.00	
			219.75	Store Exp.
			21.98	10%
				$241.73

Labor

15	Side sills 30 hrs. each	.80 hr.	360.00	
114	Decking	.34 lin. ft.	25.84	
			385.84	
	Shop Expense 13%	.....	50.16	
				436.00
	Total cost of decking and 43 ft. sills	.....	.....	677.73

201

Statement Showing Cost of Applying Side Sills—Continued

Material

Quantity	Description	Price	Detailed amount	Total amount
58	Side sills 40 ft. at	$10.95 ea.	635.10	
303	pcs. Decking 13/4 x 71/4 x 8′ 9″	25.00 M.	90.90	
98	" Decking 13/4 x 91/4 x 8′ 9″	25.00 M.	36.75	
580	lbs. Nails 20D	4.00 cwt.	23.20	
			785.95	
	Store Expense 10%		78.60	
				864.55

Labor

58	Side sills 30 hrs. ea	.80 hr.	1,392.00	
401	Decking	.34 lin. ft.	87.72	
			1,479.72	
	Shop Expense 13%		192.36	
				1,672.08
	Total cost of decking and 40 ft. sills			2,536.63

Statement Showing Cost of Repairing Brake Staffs on Logging Flats for a Period of Fifty-two Days

1,456 Brake Staffs removed, straightened and replaced:

Labor 1.1 hrs. at .80 per hr. per brake staff	$1,281.28
Shop Expense 13%	166.57
Total Cost	$1,447.85

Number of New Brake Wheels Applied for Period of Fifty-two days:

416 Brake Wheels at 1.12 each	465.92
Store Expense 10%	46.59
	512.51

Labor

416 Brake Wheels—Cost of applying .24 each	99.84
Shop Expense 13%	12.98
	112.82

Total Cost

Material	$512.51
Labor	112.82
	$625.33

Total cost of repairing brake staffs and brake wheels for a period of fifty-two days	$2,073.18
Total cost of repairing decking and sills for fifty-two days	3,214.36
	5,287.54

1,608 log flats handled into Delta during above 52-day period.

[fol. 393] G. N. EXHIBIT No. 21

Delta Shops, Oct. 19, 1921.

Statement Showing Cost of Applying Sills, Splices, End Sills and Decking to Logging Flats, Period June 25, 1921, to October 17, 1921

Material

Quantity	Description	Cost	Total cost
276	End Sills & Splices	$2,121.85	
77	End Sills	420.42	
2,821 pcs.	Decking	563.81	
820 lbs.	Nails	33.86	
2,000 lbs.	Bolts	64.80	
		3,204.74	
	Store Expense 10%	320.47	
			3,525.21

Labor

6,844 hrs.	Labor at .72 per hr.	4,927.68	
	Shop Expense 17%	837.71	
			5,765.39
	Total Cost		9,290.60

Brake Staffs, Grab Irons and Sill Steps Removed, Straightened, and Replaced

Labor

396	Grab Irons—108 hrs. at .72		77.76
57	Sill Steps—40 hrs. at .72		28.80
463	Brake Staffs—509 hrs. at .72		366.48
			473.04
	Shop Expense 17%		80.42
	Total Cost		553.46

[fol. 395]

G. N. Exhibit No. 22

Great Northern Railway Company

Statement Showing Rates on Logs Between Points Where There was an Appreciable Movement in 1920 Compared with Rates on Various Other Low Grade Commodities for Similar Distances

From—	To—	Distance (miles)	Logs: Rates per 1,000 feet	Logs: Rates in cents per 100 lbs. (1)	Rates in cents per 100 lbs.: Sand and gravel (2)	Common brick (3)	Grain (4)	Grain (5)	Lumber (6)	Lumber (7)	Hay (8)	Hay (9)
Monroe	Snohomish	6.9	$1.33	1.6	3¢	6½	5	5	5	5	4	4
High Rock	Snohomish	11.7	1.33	1.6	3	6½	5½	8	5	6½	5	5
Sultan Jct	Everett	19.9	2.03	2.5	3	7	6½	9½	5	6½	5	6½
Sultan	Everett	21.9	2.19	2.6	4	7	7	9½	5½	8	5	7
Gays Spur	Minkler	22.1	2.25	2.7	4	7	7	9½	5½	8	5	7
Gold Bar	Everett	27.7	2.27	2.72	4	7½	7	11½	6½	8	5	9
Gays Spur	Sedro-Woolley	28.4	2.37½	2.85	4	7½	7	11½	6½	8	5	9
Index	Snohomish	29.0	3.12½	3.75	4	7½	7	11½	6½	8	5	9
Index	Everett	36.5	3.12½	3.75	4½	8	9	14½	6½	9½	6½	11½
Birdsview	Anacortes	38.5	2.50	3.0	4½	8	9	14½	6½	9½	6½	11½
Concrete	Anacortes	44.8	2.50	3.0	5	8	9½	14½	6½	11½	7	11½
Faber	Anacortes	48.3	2.87½	3.45	5	9	9½	15½	7	11½	7	12
Nestos	Anacortes	48.3	2.87½	3.45	5	9	9½	15½	7	11½	7	12
Gays Spur	Anacortes	49.9	2.87½	3.45	5	9	9½	15½	7	11½	7	12
Springdale	Deer Park	20.1	1.72	2.06	3	7	6½	9½	5	6½	5	6½
Boyds	Arden	25.5	3.12½	3.75	4	7½	7	11½	6½	8	5	9
Deer Park	Spokane	26.5	3.12½	3.75	4	7½	7	11½	6½	8	5	9
Williams	Arden	34.2	3.52	4.2	4½	7½	8	12½	6½	9½	6½	9½
Springdale	Spokane	46.6	3.12½	3.75	4½	9	9½	15½	7	11½	7	12
Clines	Spokane	47.8	3.12½	3.75	4½	9	9½	15½	7	11½	7	12
Valley	Spokane	56.5	3.75	4.5	5½	9½	11½	17½	8	12½	9	13
Orient	Deer Park	91.4	4.06½	4.86	7½	12	14½	18	11½	17½	12	14½
Pooles	Deer Park	105.8	4.06½	4.86	8	12½	15	19	12	19	13	15½
Napoleon	Spokane	107.1	4.69	5.6	8	12½	15	19	12	19	13	15½

(1) Weight of 8,325 lbs. used in coverting rates to weight basis.
This in accordance with exhibit previously introduced.
(2) North Pacific Coast Freight Bureau Tariff 25-B, W. P. S. C. No. 50.
(3) " " " " " " 2-A, W. P. S. C. No. 33.
(4) " " " " " " 10 W. D. P. W. No. 44 (Western Washington).
(5) " " " " " " 10 W. D. P. W. No. 44 (Eastern Washington).
(6) Great Northern Tariff 1471-B, W. D. P. W. No. 923 (Western Washington).
(7) " " " 1550-B, W. P. S. C. No. 728 (Eastern Washington).
(8) North Pacific Coast Freight Bureau Tariff 12 W. D. P. W. No. 46 (Western Washington).
(9) " " " " " " 12 W. D. P. W. No. 46 (Eastern Washington).

[fol. 394] Delta Shops, Oct. 19, 1921.

Statement Showing Cost of Applying Brake Staffs, Brake Wheels, Sill Steps and Grab Irons to Logging Flats Period June 25, 1921, to October 17, 1921

Material

Quantity	Description	Cost	Total cost
57	Brake Staffs	23.82	
179	Brake Wheels	200.48	
60	Sill Steps No. 1	22.80	
173 lbs.	Sill Step Bolts	6.29	
180	Grab Irons	16.20	
186 lbs.	Grab Iron Bolts	6.77	
		276.36	
	Store Expense 10%	27.64	
			304.00

Labor

216 hrs.	Labor at .72 per hr	155.52	
	Shop Expense 17%	26.44	
			181.96
	Total Cost		485.96

(Here follows G. N. Exhibit No. 22, marked side folio page 395.)

[fol. 396] G. N. Exhibit No. 23

Great Northern Railway Company

Deficit Resulting from Handling Logs in the State of Washington Based on Traffic of 1920

Revenues adjusted to basis of incredased rates effective Aug. 26, 1920.

Expenses based on handling solid log trains with reduced wage scales and material costs effective After July 1, 1921.

[fol. 396-1] Great Northern Railway Company

Summary of Results of Operation of Log Service in the State of Washington Based on Cost of Operating Solid Log Trains Under Reduced Wages and Cost of Materials Effective After July 1, 1921

Revenue from logs, January-August, 1920	$221,174
Add 25% for increase in rates effective August 26, 1920	55,294
Revenue from logs, September to December, 1920	97,316
Switching and demurrage revenue (logs)	473
Total revenue at increased rates	$374,257
Operating Expenses	425,578
Net deficit from railway operations	[51,321]*
Taxes	36,322
Railway operating deficit	[87,643]*
Capital charges applicable	80,218
Net loss from handling logs	[167,861]*

[fol. 396-2] Great Northern Railway Company

Road Haul Cost per Car for Handling Solid Train Loads of Logs Between Gold Bar and Everett, Wash., 31.3 Miles, Based on Reduced Wages and Material Costs Effective After July 1, 1921

A study of the train register for August, September, October and November, 1920, showed the following as comprising all of the solid train load movement of logs between Gold Bar and Everett:

19 eastbound empty trains with 453 cars.
24 westbound loaded trains with 659 cars.

Wages of train and enginemen, basis of reduced rates effective July 1, 1921.

	19 eastbound trains	24 westbound trains
Trainmen	$284.15	$401.15
Enginemen	208.50	292.75
Total	$492.65	$693.90

[*Red in copy.]

Engine service expense for class of locomotive used:

Item	Cost per locomotive-mile average, July and Aug., 1921
Locomotive repairs	$.2128
Enginehouse expenses	.0836
Lubricants	.0059
Locomotive supplies	.0035
Total cost per locomotive mile	$.3058

Locomotive miles between Gold Bar and Everett:

Gold Bar to log tracks	2.0 miles
Log tracks to Everett	31.3 miles
Total locomotive miles	33.3

Cost for 19 east bound trains, 19 x 33.3 x $.3058 or $193.48.
Cost for 24 west bound trains, 24 x 33.3 x $.3058 or $244.40.

Fuel:

Cost fuel based on cost in July and August, 1921.
19 east bound trains, 373 bbls. of fuel oil at $2.169 or $809.04.
24 west bound trains, 496 bbls. of fuel oil at $2.169 or $1,075.82.

Total cost engine service, wages, fuel and supplies:

Item	19 eastbound trains	24 westbound trains
Wages	$492.65	$693.90
Engine service	193.48	244.40
Fuel	809.04	1,075.82
Total	$1,495.17	$2,014.12

Cost per car:

East bound	$1,495.17 / 453 or	$3.30
West bound	$2,014.12 / 659 or	$3.06
		$6.36

[fol. 396-3] Car repairs:

Based on 52-day study, period ended June 25, 1921.

Log cars handled into Everett	1,608
Cost of repairs to log cars	$5,287.54
Average cost per car	$3.288

After July 1, 1921, wage scale for car repairers was 90% of previous rate.

Reducing $3.288 proportionately, the average cost per car for repairs, wage rates effective July 1, 1921, 90% of $3.288 or $2.96.

Total cost per car for road service direct expenses:

Direct transportation expense (including locomotive maintenance)	$6.36 per car
Car repairs	2.96 per car
Total	$9.32 per car

[fol. 396–4] Great Northern Railway Company

Cost of Switching Service in Connection With Handling Logs at Everett, Based on Wage Scale and Material Costs Effective After July 1, 1921

Wages of yard crew for eight hours:

Engineer	$6.40
Fireman	4.96
Foreman	6.32
2 Helpers	11.68
Total wages for 8 hrs.	$29.36

Engine service expense for class of locomotive used:

Item	Cost per locomotive mile, average July and Aug., 1921	
Fuel	$.5756	
Locomotive repairs	.0833	
Enginehouse expenses	.0764	
Lubricants	.0030	
Locomotive supplies	.0034	
Total cost per locomotive mile	$.7417	
Yard Service computed at 48 miles per 8 hr. day: 48 X $.7417		35.60
Grand total cost for eight hours		$64.96
Cost per hour		8.12

Average time spent in switching each day:

	Time spent in switching	Cars handled in 1920	Cars, times, hours
Weyerhaeuser Mill "B"	4 hours	5680	22,720
Northern Pacific Log Dump	6.5 hours	2632	17,108
Totals and average	4.8 hours	8312	39,828

Cost of switching logs each day, 4.8 hrs. x $8.12 per hr. or $38.98

Average number of cars handled per day, Sept. 7 to Oct. 19, 1921 ..... 21.4

Cost per car, engine service, wages, fuel and supplies $38.98 / 21.4 or $1.82

Other expenses in connection with yard operation at Everett:

Item	July, 1921	August, 1921	Total July and August, 1921
Yardmasters	$888.45	$877.90	$1,766.35
Yard Clerks	1,269.75	1,285.80	2,555.55
Lampmen	106.00	111.30	217.30
Total			$4,539.20

Cars handled at Everett: July, 1921 7,798
August, 1921 9,161
Total 16,959

Cost per car for other expenses $4,539.20 / 16,959 or .... $.268

For each car of logs unloaded there are 2 cars handled, one loaded and one empty ....

Cost per car for other yard expenses 2 x $.268 ..... .54

Total cost per car for yard service direct expense ... $2.36

[fol. 396–5] Great Northern Railway Company

Distribution of Freight Expenditures, State of Washington, for the Purpose of Determining What Expenses in Addition to That Already Found Are Properly Chargeable to Cost of Handling Log Shipments Calendar Year, 1920

Total maintenance of way & Structures—Freight.. $3,053,351.90

Less amounts not applicable to log movements:

Acct. 223 Snow and Sand Fences & snowsheds	$78,293.55	
272 Removing snow, ice and sand	27,632.67	
241 Wharves and docks ...	133,460.47	
		239,386.69
		$2,813,965.21

Assign to logs on I. C. C. basis, fuel consumed:

Acct. 394 Fuel for train locomotives, freight..	$2,001,926.68
Fuel consumed by log trains, 869 bbls. of oil at $2.098	1,823.16
Proportion of Maint. of way & structures applicable to logs, $1,823.16 / $2,001,926.68 or	.09107%
.09107% of $2,813,965.21 equals	$2,562.68

Maint. of Way & Structure cost per car:

2 x $2,562.68 / 1112	$4.61

Reduction to Basis of Reduced Wage Scale Effective July 1, 1921

Wages of track labor:

January to April, 1920	$.40 per hour.
May to Dec. 1920	.485 per hour.
After July 1, 1921	.40 per hour.
Reduction July 1, 1921	17.5%

Cascade Division, Maintenance of Way and Structure Expense

	1920, actual	1920 on basis of wage scale effective July 1, 1921
January to April	$847,116.69	$847,116.69
May to December	1,805,358.82	1,489,421.01
Total	$2,652,475.51	$2,336,537.70

If reduced wage scale had been effective entire year the maintenance of way and structure expenses would have been

$2,336,537.70 / $2,652,475.51 or ..... 88.0889% of actual.

On basis of reduced wage scale, maintenance of way and structure expense per car of logs would have been
88.0889% of $4.61 or $4.06

Other Items of Expense, Calendar Year 1920

	Expenses included in detail	Miscellaneous expenses applicable but not included	Expenses not applicable
Maintenance of Way expenses	$2,813,965.21		$239,386.69
Acct. 308. Steam locomotive—Repairs	1,046,331.40		
314. Freight train car repairs	1,240,520.42		
377. Yardmasters and Yard Clerks	211,389.91		
378. Yard Conductors and Brakemen	333,977.18		
379. Yard Switch and Signal Tenders	9,061.14		
380. Yard Enginemen	219,366.00		
382. Fuel for yard locos.	415,519.33		
386. Lubricants for yard locos.	3,326.51		
387. Other supplies for yard locos.	3,520.13		
388. Enginehouse expenses—yard	66,312.78		
392. Train enginemen	588,406.94		
393. Train motormen	18,783.70		
394. Fuel for train locos.	2,001,926.68		
398. Lubricants for train locos.	9,673.12		
399. Other supplies for train locos.	14,958.44		
400. Enginehouse expenses—train	214,457.07		
401. Trainmen	719,510.45		
418. Loss and damage—Freight	.....		335,164.83
Total above items	$9,931,006.41		$574,551.52
Balance operating expenses—Freight		$2,715,239.39	

Ratio miscellaneous expenses to all other expenses, 25.8457%.

[fol. 396-7] Great Northern Railway Company

Total Operating Expenses per Car for Handling Solid Trainloads of Logs Between Gold Bar and Everett, Wash., 31.3 Miles, Based on Reduced Wages and Cost of Material Effective After July 1st, 1921

Maintenance of Way Expense per car	$4.06
Road haul, direct expense per car	9.32
Yard handling, direct expense per car	2.36
	$15.74
Add for Miscellaneous expense 25.845%	4.07
Total Operating Expense	$19.81

21,483 cars of logs handled in 1920.
Total Operating Expense, 21,483 x $19.81 or $425,578.

[fol. 396-8] Great Northern Railway Company

Assignment of Taxes to Log Service

Calendar Year 1920

Gross operating revenue—State of Washington	$18,400,360
Gross operating revenue—System	124,897,865
Log revenue	318,963
Ratio log revenue to state revenue	1.73346%
Ratio log revenue to system revenue	.25538%

	Taxes	Log proportion (per cent)	Amount chargeable to logs
State of Washington	$1,847,974	1.73346	$32,034
U. S. Government	1,679,944	.25538	4,288
Total taxes chargeable to logs			$36,322

[fol. 396–9] Great Northern Railway Company

Assignment of Capital Charges Connected With Movement of Logs Between Gold Bar and Everett

Road

Valuation of Great Northern Railway Co.'s Line in State of Washington Between Gold Bar and Everett as Determined by State Equalization Committee, 1921, $103,124.57 per Mile, Including Proportion of Siding

Valuation of line between Gold Bar and Everett 31.3 miles x $103,124.57 or	$3,227,799.04
Interest at 6% per annum	$193,667.94
Average number of trains per day, in both directions, over line, July, August and Sept. 1921	13.5

Equivalent to 13-5 x 365 or 4,927.5 trains per year.

Average Capital Charge per Log Train, Loaded and Empty Movement

$\frac{2 \times 193{,}667.94}{4927.5}$ or $78.61

Average Number of Cars per Train

19 eastbound trains	453 cars.
24 westbound trains	659 cars.
43 Total trains	1,112 cars.

Average number of cars per train $\frac{1{,}112}{43}$ or 25.86

Capital charge per car of logs $\frac{78.61}{25.86}$ or $3.04

[fol. 396-10] Equipment

Item	Road locomotives, class L 2	Yard locomotives, class A-9	Log cars	Cabooses
Average original cost	$27,460.12	12,407.22	639.61	787.37
Interest at 6% per annum	1,647.61	744.43	38.38	47.24
Average miles per year 1920	15,944	20,864	6,413	19,134
Interest charge per mile	$.1033	$.03568	$.00598	$.00247

Road Locomotives

Interest Charge per Log Train, Loaded and Empty Movement

2 x 33.3 locomotive miles x $.1033 or $6.88
Capital charge for road locomotives per car of logs, $6.88 / 25.86 or .. $.266

Yard Locomotives

4.8 hours x 6 miles per hour equals 28.8 locomotives miles to handle 21.4 cars of logs.

Average locomotive miles per car of logs, 28.8 / 214.4 or 1.346

Capital charge for yard locomotives per car of logs, 1.346 x $.03568 or ..... $.048

Log Cars

Capital charge for log cars per car of logs, 2 x 31.3 x $.00598 or $.374

Cabooses

Capital charge per log train, loaded and empty movement 2 x 33.3 x $.00247 or $.165.

Capital charge for cabooses per car of logs $.165 / 25.86 or ..... $.006

Total capital charge for all equipment per car of logs .. $.694

[fol. 396-11] Recapitulation of Capital Charge per Car of Logs

Road	$3.040
Equipment	.694
Total	3.734

21,483 cars of logs handled in 1920.
Total capital charges applicable, $3.734 x 21,483 or $80,218.

End

TRANSCRIPT OF RECORD

Vol. II

TRANSCRIPT OF RECORD

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1924

No. 371

NORTHERN PACIFIC RAILWAY COMPANY, GREAT NORTHERN RAILWAY COMPANY, CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY, PLAINTIFFS IN ERROR,

vs.

THE DEPARTMENT OF PUBLIC WORKS OF WASHINGTON, E. V. KUYKENDALL, DIRECTOR OF PUBLIC WORKS; HANCE H. CLELAND, SUPERVISOR OF PUBLIC UTILITIES, ET AL.

IN ERROR TO THE SUPREME COURT OF THE STATE OF WASHINGTON

FILED APRIL 29, 1924

(30,296)

(30,298)

SUPREME COURT OF THE UNITED STATES

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JUDD & DETWEILER (INC.), PRINTERS, WASHINGTON, D. C., AUGUST 26, 1924

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[fol. 397]

G. N. Exhibit No. 24

20—371

Amount of Taxes Paid for Each Dollar of Gross Revenue Received in State of Washington

Calendar Year 1920

Name of road	System gross revenue 1.	State of Washington gross revenue 2.	Ratio state revenue to system revenue 3-2-1	U. S. taxes 4	U. S. taxes applicable to state of Washington 5 3 x 4	State of Washington taxes 6
Great Northern	$124,897,865	$18,400,360	.14732	$1,678,944	$247,342	$1,847,974
Northern Pacific	113,084,408	29,274,965	.25888	1,620,592	419,539	3,260,113
Chicago, Milwaukee & St. Paul	168,158,734	10,405,278	.06188	557,253	34,483	1,913,598
Oregon-Washington R. R. & N. Co.	32,912,006	10,260,232	.31175	51,267	15,982	1,048,894
	.....	$68,340,835	.....	.....	$717,346	$8,070,579

Total taxes—State of Washington		
Paid to State		$8,070,579
Proportion U. S. Taxes		717,346
Total		$8,787,925
Total gross revenue from all sources State of Washington		$68,340,835
Amount of taxes paid for each dollar of gross revenue received	$8,787,925 / $68,340,835 or	$.1286

[fol. 398] Operating Cost per 1,000 Gross Ton Miles of Revenue Freight, State of Washington

Calendar Year 1920

Northern Pacific, Great Northern, Chicago, Milwaukee & St. Paul, and O.-W. R. R. & N. Roads Combined

Name of road	Revenue net ton miles	Non-revenue net ton miles	Total net ton miles (item 4, Gray's Ex. 4)
Northern Pacific	1,639,361,728	370,133,413	2,009,495,141
Great Northern	819,418,933	110,655,379	930,074,312
Chicago, Milwaukee & St. P.	742,859,992	122,614,817	865,474,809
Oregon-Washington R. R. & N. Co.	469,467,933	67,002,101	536,470,034
Total	3,671,108,586	670,405,710	4,341,514,296

Ratio Revenue net ton miles to total net ton miles..... $\frac{3,671,108,586}{4,341,514,296}$ or .8455825

Total gross ton miles, item 5, Gray's exhibit 4,..... 8,589,577,958

Gross ton miles revenue freight, similar to gross ton miles for logs used by Mr. Gray, item 10, Ex. 4 .8455825 x 8,589,577,958 or 7,263,196,804.

[fol. 399] Cost per 1,000 gross ton miles $\frac{\$52,308,268}{7,263,196,804}$ or $7.202.

	Revenue net ton miles	Revenue gross ton miles	Ratio gross ton miles to net ton miles
All freight	3,671,108,586	7,263,196,804	1.978
Logs, items 9 & 10, Ex. 4	189,520,082	361,435,434	1.907
Freight other than logs	3,481,588,504	6,901,761,370	1.982

Cost per 1,000 Net Ton Miles

Logs ..... 1.907 x $7.202 or $13.73
Freight other than logs ..... 1.982 x 7.202 or $14.27

Revenue per 1,000 Net Ton Miles

Logs, item 12, Gray's Ex. 3..... $15.09
Intrastate freight other than logs, item 11, Gray's Ex. 3.... $22.42

Taxes per 1,000 Net Ton Miles, 12.85% of Above Revenues

Logs ..... .1286 x $15.09 or $1.94
Intrastate freight other than logs..... .1286 x $22.42 or $2.88

[fol. 400] If the gross ton miles were computed for each commodity as Mr. Gray has computed them for intrastate logs, item 10, Exhibit 4, and these items were totalled the result would be 7,263,196,804 gross ton miles of revenue freight.

Applying this item, 7,263,196,804 to Mr. Gray's cost, item 6, Exhibit 4, $6.09 would give a total cost for all operations in the state of Washington of $44,232,869 or $8,075,399 less than actual freight operating cost shown by Mr. Gray in item 1, Exhibit 4 to be $52,-308,268.

In other words, applying the same theory to all traffic that Mr. Gray applies to log traffic a cost is obtained that is over $8,000,000 short of the actual cost, and if Mr. Gray had correctly assigned operating cost to log service he would have obtained a cost for log service over 18% higher than the figure which he has shown.

[fol. 400½] Financial Results of Operating Intrastate Freight Traffic in State of Washington

Calendar Year 1920

Great Northern, Northern Pacific, Chi. Mil. & St. Paul, and Oregon-Wash. R. R. & N. Co. Combined

	Intrastate Freight other than logs	Intrastate log shipments
Freight revenue, items 1 and 2, Ex. 3..	$13,947,429	$2,859,172
Revenue ton miles, items 6 and 7, Ex. 3	621,528,454	189,520,082
Operating cost per 1,000 ton miles....	$14.27	$13.73
Total operating cost	$8,869,211	$2,602,111
Net revenue from railway operations..	$5,078,218	$257,061
Proportion of taxes, 12.85% of revenue	$1,793,639	$367,690
Railway operating income from intrastate freight other than logs.....	$3,284,579	.....
Railway operating deficit from intrastate log shipments		[$110,629]*

NOTE.—Costs shown on this exhibit do not include one cent for uncollectible revenue, equipment rents or joint facility rents nor do they include anything for return on property investment, either directly or indirectly.

[*Red in copy.]

[fol. 401 & 402-402-24] Summary of Results of Operation of Intrastate Freight, State of Washington, Based on Mr. Gray's Theory That the Average Operating Cost per 1000 Gross Ton Miles of all Traffic is a Measure of the Cost per 1000 Gross Ton Miles for Log Traffic

Based on Operations for Calendar Year 1920

Northern Pacific, Great Northern, Chicago, Milwaukee & St. Paul & O. W. R. R. & N. Roads Combined

Item	Intrastate freight other than logs	Intrastate logs	Increase of intrastate traffic other than logs over intrastate log traffic	Per cent intrastate freight other than logs of intrastate log traffic
Revenue per 1000 net ton miles (items 11 and 12, Gray's Ex. 3).	$22.42	$15.09	$7.33	149%
Operating cost per 1000 net ton miles	14.27	13.73	.54	104%
Net revenue from railway operations per 1000 net ton miles	8.15	1.36	$6.79	599%
Taxes assignable, 12.86% of revenue	2.88	1.94	.94	
Railway operating income per 1000 net ton miles for intrastate freight other than logs	5.27			
Railway operating deficit per 1000 net ton miles from intrastate log shipments		[$.58]*	$5.85	
Railway operating income per $1.00 of gross revenue received from intrastate freight other than logs.	$.235			
Railway operating deficit per $1.00 of gross revenue received from intrastate log shipments		[.038]*	$.273	
Revenue per 1000 board feet of logs, from 11, Gray's Exhibit 2		$1.711		
Operating loss per 1000 board feet of logs, $1.711 x $.038 or		[$.065]*		

NOTE.—Costs shown on this exhibit do not include one cent for uncollectable revenue, equipment rents or joint facility rents nor do they include anything for return on property investment, either directly or indirectly.

(Here follow tables marked side folio pages 402-25,–402-72–405, 406, and 426.)

[fol. 427-449] NOTE 1.—The figures entered on page 303A as "Gross Receipts from Interstate business accruing to the State of Washington divided on Straight Mileage Basis" have been compiled upon that basis in accordance with the order of the Railroad commission and are given under protest, for the reason that this company claims

[*Red in copy.]

SCHEDULE "C"—Table I.—Abstract of Assessment Roll of Operating Property of Steam Railroads and Electric Roads—State of Washington, Year 1921.

BLAKELY RAILROAD.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Mason.....	Main Line	41.00	10.000	$7,644 00	$76,440	$3,134 04	$31,340	$119 17	$1,192	$48 89	$489	$77,632	$31,830
	Main Track	.....	.350	1,528 80	535	626 81	219	23 83	8	9 77	3	543	222
	Sidings	.....											
	Totals.....	.....	10.350	.....	$76,975	.....	$31,560	.....	$1,200	.....	$492	$78,175	$32,052

CHICAGO, MILWAUKEE & ST. PAUL RAIWAY COMPANY.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Adams.....	Main Line	40.00	74.516	$73,806 90	$5,499,795	$29,522 76	$2,199,918	$8,899 92	$663,932	$3,563 97	$265,573	$6,163,727	$2,465,491
	Main Track	.....	19.318	14,761 38	285,160	5,904 55	114,064	1,781 99	34,425	712 80	13,770	319,585	127,834
	Sidings	.....											
	Branch Lines—												
	Main Track	.....	29.595	14,761 38	436,863	5,904 55	174,745	1,781 99	52,738	712 80	21,095	489,601	195,840
	Sidings	.....	2.486	3,690 35	9,174	1,476 14	3,670	445 50	1,108	178 20	443	10,282	4,113
	Totals.....	.....	125.915	.....	$6,230,992	.....	$2,492,397	.....	$752,203	.....	$300,881	$6,983,195	$2,793,278

Benton.....	Branch Lines	40.00											
	Main Track		28.561	$14,761 38	$421,600	$5,904 75	$168,640	$1,781 99	$50,895	$712 80	$20,358	$472,495	$188,998
	Sidings		2.451	3,690 35	9,045	1,476 14	3,618	445 50	1,092	178 20	437	10,137	4,055
	Totals.....		31.012	.....	$430,645	.....	$172,258	.....	$51,987	.....	$20,795	$482,632	$193,053
Clallam.....	Branch Lines	44.00											
	Main Track		62.302	$14,761 38	$919,643	$6,495 01	$404,652	$1,781 99	$111,022	$784 08	$48,850	$1,030,685	$453,502
	Sidings		12.070	3,690 35	44,543	1,623 75	19,59.	445 50	5,377	196 02	2,366	49,920	21,965
	Totals.....		74.372	.....	$964,206	.....	$424,251	.....	$116,399	.....	$51,216	$1,080,605	$475,467
Grant.....	Main Line	35.00											
	Main Track		36.600	$73,906 90	$2,705,761	$25,832 42	$947,017	$8,909 92	$826,638	$3,118 47	$114,323	$3,032,389	$1,061,340
	Sidings		5.500	14,761 38	81,188	5,166 48	28,41.	1,781 99	9,801	623 70	3,430	90,989	31,846
	Branch Lines—												
	Main Track		32.983	$14,761 38	486,875	5,166.48	170.40	1,781 99	58,775	623 70	20.572	545,650	190,978
	Sidings		2.959	3,690 35	10,920	1,291 62	3,822	445 50	1,318	155 93	461	12,238	4,283
	Totals.....		78.102	.....	$3,284,744	.....	$1,149,903	.....	$896,532	.....	$138,786	$3,681,276	$1,288,447
Grays Harb'r	Grays Harbor B'ch..	41.00											
	Sidings		2.181	$7,380 60	$16,097	$3,036 08	$6,600	$889 99	$1,943	$365 31	$797	$18,040	$7,397
Jefferson....	Main Line	42.00											
	Sidings		.390	$14,761 38	$5,757	$6,199 78	$2,418	$1,781 99	$695	$748 44	$292	$6,452	$2,710
	Branch Lines—												
	Main Track		9.228	14,761 38	136,218	6,199 78	57,211	1,781 99	16,444	748 44	6,907	152,662	64,118
	Sidings		1.002	3,690 35	3,919	1,549 65	1,646	445 50	473	187 11	199	4,392	1,845
	1 Barge Landing		.....	.....	15,000	.....	6,300	.....	15,000	.....	6,300	30,000	12,600
	Totals.....		10.620	.....	$160,894	.....	$67,575	.....	$32,612	.....	$13,698	$193,506	$81,273
King	Main Line	47.00											
	Main Track		51.873	$73,806 90	$3,828,585	$34,689 24	$1,700,435	$8,909 92	$462,184	$4,187 66	$217,236	$4,290,760	$2,016,661
	Sidings		54.882	14,761 38	810,134	6,937 85	380,703	1,781 99	97,790	837 54	45,966	907,933	426,729
	Everett Branch—												
	Main Track		24.060	25,832 42	870,852	12,141 24	412,531	3,118 48	106,215	1,465 69	49,921	986,067	463,452
	Sidings		4.741	7,380 60	34,992	3,468 02	16,446	889 99	4,224	418 77	1,985	39,216	18,431
	White River Branch—												
	Main Track		16.035	18,451 73	295,874	8,672 31	139,060	2,227 49	35,718	1,046 92	16,787	331,502	155,847
	Sidings		4.097	3,690 35	11,097	1,734 46	5,214	445 50	1,340	209 39	630	12,437	5,846
	1 Barge Landing		.....	.....	15,000	.....	7,050	.....	15,000	.....	7,050	30,000	14,100
	Totals.....		164.598	.....	$5,875,534	.....	$2,761,501	.....	$722,480	.....	$339,565	$6,598.014	$3,101,066

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY—Continued.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Kitsap	Main Line	44.00											
	Sidings		.260	$14,761 38	$3,838	$6,495 01	$1,688	$1,781 99	$463	$784 08	$204	$4,301	$1,893
	2 Barge Landings				30,000		13,200		30,000		13,200	60,000	26,400
	Totals		.260		$33,838		$14,888		30,463		13,404	64,301	28,293
Kittitas	Main Line	41.00											
	Main Track		90.620	$73,806 90	$6,688,381	$30,260 83	$2,742,237	$8,900 92	$807,417	$3,653 07	$331,041	$7,495,798	$3,073,278
	Sidings		26.412	$14,761 38	389,878	6,052 17	159,850	1,781 99	47,066	730 62	19,297	436,944	179,147
	Branch Lines—												
	Main Track		7.041	14,761 38	103,925	6,052 17	42,613	1,781 99	12,547	730 62	5,144	116,482	47,757
	Sidings		.342	3,690 35	1,262	1,513 04	518	445 50	152	182 66	62	1,414	580
	Totals		124.415		$7,183,456		$2,945,218		$867,182		$355,544	$8,050,638	$3,300,762
Lewis	Willapa Harbor B'ch.	36.00											
	Main Track		31.971	$18,451 73	$589,920	$6,642 62	$212,371	$2,227 49	$71,215	$801 90	$25,633	$661,135	$238,009
	Sidings		4.819	3,690 35	17,784	1,328 53	6,402	445 50	2,147	160 38	773	19,931	7,175
	Morton Branch—												
	Main Track		17.554	18,451 73	323,902	6,642 62	116,605	2,227 49	39,101	801 90	14,076	363,003	130,681
	Sidings		6.464	3,690 35	23,854	1,328 53	8,587	445 50	2,886	160 38	1,037	26,734	9,624
	Totals		60.808		$955,460		$343,965		$115,343		$41,524	$1,070,803	$385,489
Pacific	Willapa Harbor B'ch.	41.00											
	Main Track		23.651	$18,451 73	$436,402	$7,565 21	$178,925	$2,227 49	$52,682	$913 27	$21,600	$489,084	$200,525
	Sidings		4.964	3,690 35	18,319	1,513 04	7,511	445 50	2,211	182 66	907	20,530	8,418
	Totals		28.615		$454,721		$186,436		$54,893		$22,507	$509,614	$208,943

Pend Oreille.	Pend Oreille Branch..	40.00											
	Main Track	.....	70.821	$25,832 42	$1,829,478	$10,322 97	$731,791	$3,118 48	$220,854	$1,247 79	$88,341	$2,050,332	$820,132
	Sidings	.....	8.753	7,280 00	64,033	2,952 28	25,841	800 99	7,799	356 40	3,120	72,402	28,961
	Totals.....	.....	79.574	.....	$1,894,081	.....	$757,632	.....	$228,653	.....	$91,461	$2,122,734	$849,093
Pierce.....	Main Line	43.00											
	Main Track	.....	13.000	$73,806 90	$960,154	$31,795 97	$412,866	$8,999 92	$115,999	$3,831 27	$49,841	$1,076,053	$462,707
	Sidings	.....	49.270	14,761 38	727,250	6,347 39	312,730	1,781 99	87,799	705 24	37,754	815,092	350,490
	Grays Harbor B'ch—												
	Main Track	.....	16.159	25,832 42	417,426	11,107 94	179,403	3,118 48	50,362	1,340 95	21,668	467,818	201,161
	Sidings	.....	4.247	7,280 00	31,246	3,173 70	13,479	800 99	3,784	363 13	1,627	35,130	15,106
	National Park B'ch—												
	Main Track	.....	55.778	25,832 42	1,440,881	11,107 94	619,579	3,118 48	173,942	1,340 95	74,705	1,614,823	694,274
	Sidings	.....	22.921	7,280 00	169,173	3,173 70	72,744	800 99	20,422	363 13	8,782	189,595	81,526
	6 Barge Landings...	.....	.....	.....	90,000	.....	38,700	.....	90,000	.....	38,700	180,000	77,400
	Totals.....	.....	161.384	.....	$3,836,273	.....	$1,649,507	.....	$542,248	.....	$233,107	$4,378,521	$1,882,764
Snohomish..	Everett Branch	41.00											
	Main Track	.....	20.878	$25,832 42	$539,329	$10,591 29	$221,125	$3,118 48	$65,108	$1,278 58	$26,694	$604,437	$247,819
	Sidings	.....	16.029	7,280 00	116,705	3,025 08	48,505	800 99	14,282	365 21	5,856	132,587	54,361
	Totals.....	.....	36.907	.....	$657,034	.....	$269,630	.....	$79,390	.....	$32,550	$737,024	$302,180
Spokane.....	Main Line	40.00											
	Main Track	.....	13.498	$73,806 90	$996,240	$29,522 70	$385,498	$8,999 92	$120,266	$3,563 97	$48,109	$1,116,512	$446,604
	2nd Main Track....	.....	1.904	22,142 07	42,158	8,856 83	16,893	2,672 98	5,080	1,069 19	2,030	47,247	18,899
	Sidings	.....	6.705	14,761 38	98,975	5,904 55	39,596	1,781 99	11,948	712 80	4,779	110,923	44,369
	Coeur d'Alene B'ch—												
	Main Track	.....	12.260	18,451 73	226,218	7,380 00	90,487	2,227 49	27,300	891 00	10,924	253,527	101,411
	Sidings	.....	5.602	3,690 35	18,720	1,476 14	5,317	445 50	1,605	178 20	642	14,858	5,950
	Totals.....	.....	37.969	.....	$1,376,899	.....	$550,755	.....	$166,217	.....	$66,487	$1,543,107	$617,242
Thurston....	Grays Harbor B'ch...	39.00											
	Main Track	.....	12.351	$25,832 42	$825,730	$10,074 64	$325,935	$3,118 48	$100,899	$1,216 21	$39,347	$930,619	$305,282
	Sidings	.....	12.158	7,280 00	96,907	2,878 47	37,817	800 99	11,700	347 49	4,505	106,673	42,382
	Willapa Harbor B'ch—												
	Main Track	.....	10.298	18,451 73	190,016	7,196 17	74,109	2,227 49	22,939	868 72	8,946	212,956	83,692
	Sidings	.....	1.556	3,690 35	5,742	1,439 24	2,240	445 50	693	173 75	270	6,435	2,310
	Totals	.....	37.346	.....	$1,128,455	.....	$440,098	.....	$136,227	.....	$53,128	$1,264,682	$493,226

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY—Continued.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Whatcom....	Bellingham Branch...	40.00											
	Main Track		41.308	$18,451 73	$817,559	$7,380 69	$327,024	$2,227 49	$98,606	$891 00	$39,478	$916,255	$366,502
	Sidings		25.555	2,090 35	94,299	1,476 14	37,730	445 50	11,384	178 20	4,554	105,683	42,274
	Nooksack Spur—												
	Main Track		11.292	18,451 73	208,357	7,380 69	83,342	2,227 49	25,153	891 00	10,061	233,510	93,404
	Sidings		2.210	2,090 35	8,150	1,476 14	3,262	445 50	984	178 20	394	9,140	3,656
	Other Branch Lines—												
	Main Track		5.208	14,761 38	78,353	5,904 53	31,341	1,781 99	9,456	712 80	3,784	87,812	35,125
	Sidings		1.721	2,090 35	6,251	1,476 14	2,540	445 50	766	178 20	307	7,116	2,847
	1 Barge Landing.....				15,000		6,000		15,000		6,000	30,000	12,000
	Totals.....		99.392		$1,228,075		$491,239		$161,443		$64,578	$1,389,518	$555,808
Whitman....	Main Line	37.00											
	Main Track		58.550	$73,806 90	$4,321,894	$27,368 55	$1,598,946	$8,909 92	$521,676	$3,296 67	$192,979	$4,843,076	$1,791,936
	Sidings		15.012	14,761 38	221,589	5,904 71	81,991	1,781 99	26,751	650,34	9,926	248,340	91,940
	Totals.....		73.562		$4,543,992		$1,680,937		$548,427		$202,916	$5,091,419	$1,883,875
Yakima.....	Branch Lines	44.00											
	Main Track		10.183	$14,761 38	$150,315	$6,405 01	$66,130	$1,781 99	$18,146	$784 08	$7,984	$168,461	$74,123
Totals....	Main Line—												
	Main Track		338.726	$73,806 90	$25,000,316		$10,098,887	$8,909 92	$3,018,022		$1,219,130	$28,018,338	$11,318,017
	2nd Main Track....		1.904	22,142 07	42,158		16,863	2,672 98	5,089		2,036	47,247	18,899
	Sidings		177.749	14,761 38	2,623,821		1,121,517	1,781 99	316,747		135,390	2,940,568	1,256,907
	Pend Oreille Branch—												
	Main Track		70.821	25,832 42	1,829,478		731,791	3,118 48	220,854		88,341	2,050,332	820,132
	Sidings		8.753	7,380 69	64,693		25,841	890 99	7,799		3,120	72,402	28,961
	Everett Branch—												
	Main Track		54.938	25,832 42	1,419,181		634,656	3,118 48	171,323		76,615	1,590,504	711,271
	Sidings		20.770	7,380 69	153,297		64,051	890 99	18,506		7,841	171,803	72,792
	Grays Harbor B'ch—												
	Main Track		48.511	25,832 42	1,253,156		505,428	3,118 48	151,281		61,015	1,404,437	566,443
	Sidings		19.566	7,380 69	144,410		57,806	890 99	17,433		6,989	161,843	64,885

National Park B'ch—												
Main Track		55.778	25,822 42	1,440,881		619,579	3,118 48	173,942		74,795	1,614,823	694,374
Sidings		22.921	7,380 69	169,173		72,744	890 99	20,422		8,782	189,595	81,526
White River B'ch—												
Main Track		16.035	18,451 73	295,874		139,060	2,227 49	35,718		16,787	331,502	155,847
Sidings		3.007	3,690 35	11,097		5,216	445 50	1,340		630	12,437	5,846
Coeur d'Alene B'ch—												
Main Track		12.260	18,451 73	226,218		90,457	2,227 49	27,309		10,924	253,527	101,411
Sidings		3.602	3,690 35	13,298		5,317	445 50	1,605		642	14,808	5,959
Willapa Harbor B'ch—												
Main Track		65.920	18,451 73	1,216,338		465,402	2,227 49	146,836		56,184	1,368,174	521,586
Sidings		11.339	3,690 35	41,845		16,153	445 50	5,051		1,950	46,896	18,103
Bellingham Branch—												
Main Track		44.308	18,451 73	817,559		327,024	2,227 49	98,696		39,478	916,255	366,502
Sidings		25.553	3,690 35	94,290		37,720	445 50	11,384		4,554	105,683	42,274
Morton Branch—												
Main Track		17.554	18,451 73	323,902		116,605	2,227 49	39,101		14,076	363,003	120,681
Sidings		6.404	3,690 35	23,854		8,587	445 50	2,880		1,037	26,734	9,034
Nooksack Spur—												
Main Track		11.292	18,451 73	208,357		82,343	2,227 49	25,153		10,061	233,510	93,404
Sidings		2.210	3,690 35	8,156		3,262	445 50	984		394	9,140	3,656
Other Branch Lines—												
Main Track		185.201	14,761 38	2,733,822		1,115,747	1,781 99	330,026		134,694	3,063,848	1,250,441
Sidings		23.091	3,690 35	85,214		35,413	445 50	10,287		4,275	95,501	39,688
11 Barge Landings				165,000		71,250		165,000		71,250	330,000	142,500
Totals		1248.273		$40,405,302		$16,470,739		$5,022,788		$2,050,990	$45,428,090	$18,521,729

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY—Continued.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks: Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	PERSONAL PROPERTY Equipment and Rolling Stock: Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	TOTAL VALUATION Real and Personal Property: Actual value	Equalized value
EQUIPMENT LINES.	(ONLY) OVER FOREIGN												
Adams	Main Line (Over O.-W. R. & N. Co.)	40.00											
	Main Track		19.210					$8,909 92	$171,160	$3,563 97	$68,464	$171,160	$68,464
	Sidings		3.520					1,781 99	6,273	712 80	2,509	6,273	2,509
	Totals		22.730						$177,433		$70,973	$177,433	$70,973
Grays Harb'r	Grays Harbor B'ch. (Over N. P. Ry. Co.)	41.00											
	Main Track		4.740					$3,118 48	$14,810	$1,278 58	$6,072	$14,810	$6,072
	2nd Main Track		1.350					1,336 49	1,804	547 96	740	1,804	740
	Sidings		14.861					890 99	13,241	365 31	5,429	13,241	5,429
	(Over O.-W. R. & N. Co.)												
	Main Track		43.090					3,118 48	134,375	1,278 58	55,094	134,375	55,094
	2nd Main Track		1.650					1,336 49	2,205	547 96	904	2,205	904
	Sidings		16.560					890 99	14,755	365 31	6,050	14,755	6,050
	Totals		82.260						$181,190		$74,289	$181,190	$74,289
King	Main Line (Over Pacific Coast R. R.)	47.00											
	Main Track		20.365					$8,909 92	$181,450	$4,187 66	$85,282	$181,450	$85,282
	2nd Main Track		10.301					2,672 98	27,535	1,256 30	12,941	27,535	12,941
	Sidings		8.270					1,781 99	14,737	837 54	6,926	14,737	6,926
	(Over O.-W. R. & N. Co.)												
	Main Track		3.340					8,909 92	29,759	4,187 66	13,987	29,759	13,987
	2nd Main Track		3.100					2,672 98	8,286	1,256 30	3,894	8,286	3,894
	Sidings		3.690					1,781 99	6,575	837 54	3,091	6,575	3,091
	White River Branch—(Over White River Logging Co.)												
	Main Track		1.900					3,118 48	5,925	1,465 09	2,785	5,925	2,785

	Terminals—												
	(Over N. P. Ry. Co.)												
	Sidings		1.795					1,781 99	3,199	837 54	1,503	3,199	1,503
	Totals		52.761						$277,406		$130,409	$277,406	$130,409
Lewis	Branch Lines	36.00											
	(Over N. P. Ry. Co.)												
	Sidings		.131					$890 99	$117	$320 76	$42	$117	$42
Lincoln	Main Line	38.00											
	(Over O.-W. R. & N. Co.)												
	Main Track		7.000					$8,909 92	$62,309	$3,385 77	$23,700	$62,309	$23,700
	Sidings		1.350					1,781 99	2,406	677 16	914	2,406	914
	Totals		8.350						$64,775		$24,614	$64,775	$24,614
Pierce	Terminals	43.00											
	(Over N. P. Ry. Co.)												
	Sidings		.447					$1,781 99	$797	$706 20	$343	$797	$343
Snohomish	Terminals	41.00											
	(Over N. P. Ry.) N. Co.)												
	Sidings		.830					$1,781 99	$1,490	$730 62	$611	$1,490	$611
Spokane	Main Line	40.00											
	(Over O.-W. R. & N. Co.)												
	Main Track		52.580					$8,909 92	$468,848	$3,563 97	$187,394	$468,484	$187,394
	2nd Main Track		1.290					2,672 98	3,448	1,069 19	1,379	3,448	1,379
	Sidings		8.470					1,781 99	15,093	712 80	6,037	15,093	6,037
	(Over N. P. Ry. Co.)												
	Terminals—												
	Sidings		.476					1,781 99	848	712 80	339	848	339
	Totals		62.816						$487,873		$195,149	$487,873	$195,149
Thurston	Grays Harbor B'ch.	39.00											
	Over O.-W. R. & N. Co.)												
	Main Track		1.750					$3,118 48	$5,457	$1,216 21	$2,128	$5,457	$2,128
	Sidings		2.370					890 99	2,111	347 49	824	2,111	824
	Totals		4.120						$7,568		$2,952	$7,568	$2,952

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY—Concluded.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Whitman....	Main Line..... (Over O.-W. R. R. & N. Co.)	37.00											
	Main Track.....		1.570					$8,900 92	$13,980	$3,296 67	$5,176	$13,980	$5,176
Totals..	Main Line—												
	Main Track.....		104.065					$8,900 92	$927,211	.....	$384,003	$927,211	$384,003
	2nd Main Track....		14.691					2,672 98	39,269	.....	18,214	39,269	18,214
	Sidings		28.854					1,781 99	51,418	.....	22,273	51,418	22,273
	Branch Lines—												
	Main Track.....		51.489					3,118 48	160,567	.....	66,079	160,567	66,079
	2nd Main Track....		3.060					1,336 49	4,009	.....	1,644	4,009	1,644
	Sidings		33.922					890 99	30,224	.....	12,345	30,224	12,345
	Totals.....		236.021					.....	1,212,698	.....	$504,558	$1,212,698	$504,558
Track and Equipment.....			1,248.273	.....	40,405,302	.....	16,470,739	.....	$5,022,788	.....	$2,050,800	$45,428,090	$18,521,729
Equipment (only) over foreign lines.....			236.021	.....	.....	.....	.....	.....	1,212,698	.....	504,558	1,212,698	504,558
Totals.....			1,484.294	.....	40,405,302	.....	16,470,739	.....	$6,235,486	.....	$2,555,348	$46,640,788	$19,026,287

COWLITZ, CHEHALIS & CASCADE RAILWAY.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Lewis.....	Main Line	36.00											
	Main Track		18.320	$7,500 00	$137,400	$2,700 00	$49,464	$1,617 23	$29,628	$582 21	$10,666	$167,028	$60,130
	Sidings		1.150	1,500 00	1,725	540 00	621	323 45	372	116 44	134	2,097	755
	Totals.....		19.470	.....	$139,125	.....	$50,085	.....	$30,000	.....	$10,800	$169,125	$60,885

GREAT NORTHERN RAILWAY.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Chelan	Main Line	45.00											
	Main Track		66.664	$88,432 85	$5,895,288	$30,794 78	$2,052,879	$8,571 60	$571,417	$3,857 22	$257,138	$6,466,705	$2,910,017
	Sidings		40.636	17,686 57	718,712	7,958 96	323,420	1,714 32	69,663	771 44	31,348	788,375	354,768
	Branch Lines—												
	Main Track		51.426	26,529 85	1,364,324	11,038 43	613,946	2,571 47	132,240	1,157 16	59,508	1,496,564	673,454
	Sidings		4.843	4,421 64	21,414	1,989 74	9,637	428 57	2,076	192 86	934	23,490	10,571
	Totals		163.569		$7,999,738		$3,599,882		$775,396		$348,928	$8,775,134	$3,948,810
Douglas	Main Line	38.00											
	Main Track		15.379	$88,432 85	$1,360,009	$33,604 48	$516,803	$8,571 60	$131,823	$3,257 21	$50,093	$1,491,832	$566,895
	Sidings		3.873	17,686 57	68,500	6,720 90	26,030	1,714 32	6,640	651 44	2,523	75,140	28,553
	Branch Lines—												
	Main Track		60.839	26,529 85	1,614,050	10,081 34	613,329	2,571 47	156,446	977 16	59,449	1,770,496	672,788
	Sidings		5.731	4,421 64	25,340	1,689 22	9,629	428 57	2,456	162 86	934	27,796	10,563
	Totals		85.822		$3,067,899		$1,165,801		$297,365		$112,999	$3,365,264	$1,278,800
Ferry	Branch Lines	42.00											
	Main Track		68.616	$26,529 85	$1,820,372	11,142 54	$764,556	$2,571 47	$176,444	$1,080 02	$74,107	$1,996,816	$838,663
	Sidings		16.016	4,421 64	70,817	1,857 09	29,743	428 57	6,864	180 00	2,883	77,681	32,625
	Totals		84.632		$1,891,189		$794,299		$183,308		$76,990	$2,074,497	$871,289
Grant	Main Line	35.00											
	Main Track		57.989	$88,432 85	$5,128,133	30,951 50	$1,794,847	$8,571 60	$497,059	$3,000 66	$173,970	$5,625,192	$1,917,446
	Sidings		19.805	17,686 57	350,283	6,190 30	122,589	1,714 32	33,952	600 01	11,883	384,235	185,853
	Totals		77.794		$5,478,416		$1,917,446		$531,011		$185,853	$6,009,427	$2,103,299
King	Main Line	47.00											
	Main Track		45.168	$88,432 85	$3,994,335	$41,503 41	$1,877,337	$8,571 60	$387,162	$4,028 65	$181,966	$4,381,497	$2,059,303
	2nd Main Track		14.577	26,529 85	386,726	12,469 03	181,761	2,571 47	37,484	1,208 59	17,618	424,210	199,379
	Sidings		59.804	17,686 57	1,057,728	8,312 69	497,132	1,714 32	102,523	805 73	48,186	1,160,251	545,318
	Totals		119.549		$5,438,789		$2,556,230		$527,169		$247,770	$5,965,958	$2,804,000

GREAT NORTHERN RAILWAY—Continued.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Lincoln.....	Main Line	38.00											
	Main Track	.....	64.899	$88,432 85	$5,739,203	$33,604 48	$2,180,897	$8,571 60	$556,288	$3,257 21	$211,390	$6,295 491	$2,392,287
	Sidings	.....	14.953	17,686 57	264,467	6,720 90	100,497	1,714 32	25,634	651 44	9,741	290,101	110,238
	Totals.....	.....	79.852	.....	$6,003,670	.....	$2,281,394	.....	$581,922	.....	$221,131	$6,585,592	$2,502,525
Okanogan...	Branch Lines	41.00											
	Main Track	.....	133.251	$26,529 85	$3,535,129	$10,877 24	$1,449,403	$2,571 60	$342,651	$1,054 30	$140,487	$3,877,780	$1,589,890
	Sidings	.....	19.183	4,421 64	84,820	1,812 87	34,776	428 57	8,221	175 71	3,371	93,041	38,147
	Totals.....	.....	152.434	.....	$3,619,949	.....	$1,484,179	.....	$350,872	.....	$143,858	$3,970,821	$1,628,037
Pend Oreille.	Main Line	40.00											
	Main Track	.....	14.783	$88,432 85	$1,305,534	$35,373 14	$522,213	$8,571 60	$126,543	$3,428 64	$50,617	$1,432,077	$572,830
	Sidings	.....	4.392	17,686 57	77,679	7,074 63	31,072	1,714 32	7,529	685 73	3,012	85,208	34,084
	Totals.....	.....	19.155	.....	$1,383,213	.....	$553,285	.....	$134,072	.....	$53,629	$1,517,285	$606,914
Pierce.....	Main Line	43.00											
	Sidings	.....	3.461	$17,686 57	$61,213	$7,095 23	$26,322	$1,714 32	$5,933	$737 16	$2,551	$67,146	$28,873
Skagit.....	Main Line	35.00											
	Main Track	.....	27.017	$88,432 85	$2,389,100	$30,951 50	$836,217	$8,571 60	$231,379	$3,000 06	$81,053	$2,620,769	$917,270
	Sidings	.....	7.615	$17,686 57	134,683	6,190 30	47,139	1,714 32	13,055	600 01	4,569	147,738	51,708
	Branch Lines—												
	Main Track	.....	53.653	26,529 85	1,423,400	9,285 45	498,192	2,571 47	137,967	900 01	48,288	1,561,373	546,480
	Sidings	.....	19.952	4,421 64	88,221	1,547 57	30,877	428 57	8,551	150 00	2,993	96,772	33,870
	Totals.....	.....	108.237	.....	$4,035,500	.....	$1,412,425	.....	$391,152	.....	$136,903	$4,426,652	$1,549,328
Snohomish..	Main Line	41.00											
	Main Track	.....	89.736	$88,432 85	$7,935,810	$36,257 47	$3,253,600	$8,571 60	$769,181	$3,514 36	$315,305	$8,704,791	$3,568,905
	2nd Main Track....	.....	17.094	26,529 85	453,501	10,877 24	185,935	2,571 47	43,957	1,054 30	18,022	497,458	203,957
	Sidings	.....	65.672	17,686 57	1,161,512	7,251 49	476,220	1,714 32	112,583	702 87	46,159	1,274,095	522,379
	Totals.....	.....	172.502	.....	$9,550,623	.....	$3,915,755	.....	$925,721	.....	$379,546	$10,476,344	$4,295,301

Spokane	Main Line	40.00											
	Main Track		58.412	$88,432 85	$5,165,540	$35,373 14	$2,066,216	$8,571 60	$506,684	$3,428 64	$200,273	$5,666,224	$2,206,489
	2nd Main Track....		3.518	26,529 85	93,332	10,611 94	37,333	2,571 47	9,047	1,028 59	3,619	102,379	40,952
	Sidings		69.499	17,686 57	1,229,199	7,074 63	491,679	1,714 32	119,143	685 73	47,658	1,348,342	539,337
	Spokane Falls & Northern Branch—												
	Main Track		16.752	30,951 49	518,490	12,380 60	207,400	3,000 00	50,257	1,200 02	20,103	568,756	227,503
	Sidings		2.885	8,843 28	25,513	3,537 31	10,205	857 16	2,473	342 86	989	27,988	11,194
	Totals.....		151.066	.....	$7,032,083	.....	$2,812,833	.....	$681,604	.....	$272,642	$7,713,687	$3,085,475
Stevens.....	Spokane Falls & Northern Branch—...	38.00											
	Main Track		109.195	$30,951 49	$3,379,748	$11,761 57	$1,284,305	$3,000 00	$327,592	$1,140 02	$124,484	$3,707,340	$1,408,789
	Sidings		20.673	8,843 28	182,817	3,360 45	69,471	857 16	17,720	325 72	6,734	200,537	76,205
	Other Branch Lines—												
	Main Track		12.153	26,529 85	322,417	10,081 34	122,519	2,571 47	31,251	977 16	11,875	353,668	134,394
	Sidings		.377	4,421 64	1,667	1,680 22	635	428 57	161	162 86	61	1,828	694
	Totals.....		142.398	.....	$3,886,649	.....	$1,476,928	.....	$376,724	.....	$143,154	$4,263,373	$1,620,082
Whatcom....	Main Line	40.00											
	Main Track		31.839	$88,432 85	$2,815,613	$35,373 14	$1,126,245	$8,571 60	$272,911	$3,428 64	$109,165	$3,068,524	$1,235,410
	Sidings		11.878	17,686 57	210,081	7,074 63	84,032	1,714 32	20,363	685 73	8,145	230,444	92,177
	Totals.....		43.717	.....	$3,025,694	.....	$1,210,277	.....	$293,274	.....	$117,310	$3,318,968	$1,327,587
Totals....	Main Line—												
	Main Track		471.866	$88,432 85	$41,728,455	.....	$16,827,254	$8,571 60	$4,044,647	.....	$1,631,030	$45,773,102	$18,458,284
	2nd Main Track....		35.189	26,529 85	933,559	.....	405,029	2,571 47	90,488	.....	39,259	1,024,047	444,288
	Sidings		301.588	17,686 57	5,334,057	.....	2,226,142	1,714 32	517,018	.....	215,775	5,851,075	2,441,917
	Spokane Falls & Northern Branch—												
	Main Track		125.947	30,951 49	3,898,247	.....	1,491,705	3,000 00	377,849	.....	144,587	4,276,096	1,636,292
	Sidings		23.558	8,843 28	208,330	.....	79,676	857 16	20,193	.....	7,723	228,523	87,399
	Other Branch Lines—												
	Main Track		379.938	26,529 85	10,079,698	.....	4,031,955	2,571 47	976,999	.....	393,714	11,056,697	4,455,660
	Sidings		66.102	4,421 64	292,279	.....	115,286	428 57	28,329	.....	11,176	320,608	120,471
	Totals.....		1404.188	.....	$62,474,625	.....	$25,207,056	.....	$6,055,523	.....	$2,443,264	$68,530,148	$27,650,320

GREAT NORTHERN RAILWAY—Concluded.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
EQUIPMENT (ONLY) OVER N. P. RY. Tracks between Seattle and Vancouver													
Clarke	Main Line	34.00											
	Main Track		17.290					$8,571 60	$148,280	$2,914 34	$50,415	$148,280	$50,415
	2nd Main Track		17.298					2,571 47	44,481	874 30	15,124	44,481	15,124
	Sidings		6.198					1,714 32	10,626	582 87	3,613	10,626	3,613
	Totals		40.786						$203,387		$69,152	$203,387	$69,152
Cowlitz	Main Line	43.00											
	Main Track		40.177					$8,571 60	$344,381	$3,685 79	$148,084	$344,381	$148,084
	2nd Main Track		40.177					2,571 47	103,314	1,103 73	44,425	103,314	44,425
	Sidings		7.441					1,714 32	12,756	737 16	5,485	12,756	5,485
	Totals		87.795						$460,451		$197,994	$460,451	$197,994
King	Main Line	47.00											
	Main Track		24.097					$8,571 60	$206,550	$4,028 65	$97,079	$206,550	$97,079
	2nd Main Track		24.118					2,571 47	62,019	1,208 59	29,149	62,019	29,149
	Sidings		3.833					1,714 32	6,571	805 73	3,088	6,571	3,088
	Totals		52.048						$275,140		$129,316	$275,140	$129,316
Lewis	Main Line	36.00											
	Main Track		28.431					$8,571 00	$243,699	$3,085 78	$87,732	$243,699	$87,732
	2nd Main Track		*30.864					2,571 47	79,366	925 73	28,571	79,366	28,571
	Sidings		26.876					1,714 32	46,074	617 16	16,587	46,074	16,587
	Totals		86.171						$369,139		$132,890	$369,139	$132,890

* Includes 2.433 miles of 3rd main line track.

Pierce.....	Main Line	43.00						$8,571 60	$329,767	$3,685 79	$141,800	$329,767	$141,800
	Main Track		38.472					2,571 47	53,787	1,105 73	23,128	53,787	23,128
	2nd Main Track....		†20.917					1,714 32	27,422	737 16	11,792	27,422	11,792
	Sidings		15.996										
	Totals.....		75.385						$410,976		$176,720	$410,976	$176,720
Thurston....	Main Line	39.00						$8,571 60	$207,835	$3,342 92	$81,056	$207,835	$81,056
	Main Track		24.247					2,571 47	18,214	1,002 87	7,105	18,214	7,103
	2nd Main Track....		7.083					1,714 32	13,965	668 58	5,446	13,965	5,446
	Sidings		8.146										
	Totals.....		39.476						$240,014		$93,605	$240,014	$93,605
Totals....	Main Line—												
	Main Track		172.723					$8,571 60	$1,480,512		$606,166	$1,480,512	$606,166
	2nd Main Track....		140.457					2,571 47	361,181		147,509	361,181	147,500
	Sidings		68.490					1,714 32	117,414		46,011	117,414	46,011
	Totals.....		381.670						$1,959,107		$799,677	$1,959,107	$799,677
Track and Equipment.....			1,404.188		$62,474,625		$25,207,056		$6,055,523		$2,443,264	$68,530,148	$27,650,320
Equipment (Only) over Foreign Lines.....			381.670						1,959,107		799,677	1,959,107	799,677
Totals.....			1,785.858		$62,474,625		$25,207,056		$8,014,630		$3,242,941	$70,489,255	$28,449,997

† Includes 1.251 miles of 3rd main line track.

MARYSVILLE & ARLINGTON RAILWAY.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Snohomish..	Main Line	41.00											
	Main Track		15.000	$8,002 39	$120,035	$3,280 94	$49,214	$921 03	$13,816	$377 63	$5,664	$133,851	$54,878
	Sidings		1.000	1,600 46	1,600	656 19	656	184 21	184	75 53	76	1,784	732
	Totals.....		16.000		$121,635		$49,870		$14,000		$5,740	$135,635	$55,610

NEWAUKUM VALLEY RAILWAY.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Lewis	Main Line	36.00											
	Main Track		10.590	$7,537 65	$79,824	$2,713 55	$28,736	$998 90	$10,578	$359 60	$3,808	$90,402	$32,544
	Sidings		1.110	1,507 53	1,673	542 71	603	199 78	222	71 92	80	1,895	683
	Totals		11.700		$81,497		$29,339		$10,800		$3,888	$92,297	$33,227

NORTHERN PACIFIC RAILWAY

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Adams	Main Line	40.00											
	Main Track		57.509	$81,682 42	$4,697,474	$32,672 97	$1,878,900	$15,462 72	$889,246	$6,185 09	$355,698	$5,586,720	$2,234,688
	Sidings		19.658	16,336 48	321,143	6,534 59	128,457	3,092 55	60,795	1,237 02	24,317	381,938	152,774
	Branch Lines—												
	Main Track		19.680	24,504 73	482,253	9,801 89	192,901	4,628 81	91,202	1,855 52	36,517	573,545	229,418
	Sidings		1.825	4,084 12	7,454	1,633 65	2,982	773 14	1,411	309 26	564	8,865	3,546
	Totals		98.672		$5,508,324		$2,203,330		$1,042,742		$417,096	$6,551,066	$2,620,426
Benton	Main Line	40.00											
	Main Track		43.736	$81,682 42	$3,572,620	$32,672 97	$1,429,050	$15,462 72	$676,308	$6,185 09	$270,524	$4,248,934	$1,699,574
	Sidings		16.700	16,336 48	272,819	6,534 59	109,128	3,092 55	51,646	1,237 02	20,658	324,465	129,786
	Branch Lines—												
	Main Track		10.621	24,504 73	260,265	9,801 89	104,106	4,628 81	49,169	1,855 52	19,707	309,534	123,813
	Sidings		1.705	4,084 12	6,963	1,633 65	2,786	773 14	1,318	309 26	527	8,281	3,313
	Totals		72.764		$4,112,673		$1,645,070		$778,541		$311,416	$4,891,214	$1,956,486

Clarke.....	Main Line	34.00												
	Main Track	.....	17.299	$81,682 42	$1,413,624	$27,772 02	$480,428	$15,462 72	$267,490	$5,257 32	$90,946	$1,680,514	$571,374
	2nd Main Track.....	.....	17.298	24,504 73	423,883	8,331 61	144,120	4,638 81	80,242	1,577 20	27,282	504,125	171,402
	Sidings	.....	7.707	16,336 4[illegible]	125,905	5,554 40	42,808	3,092 55	23,834	1,051 47	8,104	149,739	50,912
	Branch Lines—													
	Main Track	.....	27.249	24,504 73	667,729	8,331 61	227,028	4,638 81	126,403	1,577 20	42,977	794,132	270,005
	Sidings	.....	3.877	4,084 12	15,834	1,388 60	5,384	773 14	2,997	262 87	1,019	18,831	6,403
	Totals.....	.....	73.430	.....	$2,646,375	.....	$899,768	.....	$500,966	.....	$170,328	$3,147,341	$1,070,096
Columbia....	Dayton Branch	33.00												
	Main Track	.....	8.191	$28,588 85	$234,171	$9,434 32	$77,276	$5,411 95	$44,329	$1,785 94	$14,629	$278,500	$91,905
	Sidings	.....	2.527	8,168 24	20,641	2,605 52	6,812	1,546 27	3,908	510 27	1,289	24,549	8,101
	Totals.....	.....	10.718	.....	$254,812	.....	$84,088	.....	$48,237	.....	$15,918	$303,049	$100,006
Cowlitz.....	Main Line	43.00												
	Main Track	.....	40.177	$81,682 42	$3,281,755	$35,123 44	$1,411,154	$15,462 52	$621,246	$6,648 97	$267,136	$3,903,001	$1,078,290
	2nd Main Track.....	.....	40.177	24,504 73	984,526	10,537 03	423,346	4,638 81	186,373	1,994 69	80,141	1,170,899	503,487
	Sidings	.....	8.529	16,336 48	139,334	7,024 69	59,914	3,092 55	26,376	1,329 80	11,342	165,710	71,256
	Totals.....	.....	88.883	.....	$4,405,615	.....	$1,894,414	.....	$833,995	.....	$358,619	$5,239,610	$2,253,033
Franklin.....	Main Line	40.00												
	Main Track	.....	42.670	$81,682 42	$3,485,389	$32,072 97	$1,394,156	$15,462 52	$659,794	$6,185 09	$263,918	$4,145,183	$1,658,074
	Sidings	.....	43.980	16,336 48	718,642	6,534 59	287,457	3,092 55	136,041	1,237 02	54,416	854,683	341,873
	Wallula Branch—													
	Main Track	.....	1.653	28,588 85	47,257	11,435 54	18,903	5,411 95	8,946	2,164 78	3,578	56,203	22,481
	Sidings	.....	.201	8,168 24	1,666	3,267 30	667	1,546 27	315	618 51	129	1,981	793
	Other Branch Lines—													
	Main Track	.....	41.505	24,504 73	1,017,069	9,801 89	406,827	4,638 81	192,534	1,855 52	77,013	1,209,003	483,840
	Sidings	.....	2.811	4,084 12	11,480	1,633 65	4,592	773 14	2,173	309 26	869	13,653	5,461
	Totals.....	.....	132.833	.....	$5,281,503	.....	$2,112,602	.....	$999,803	.....	$399,920	$6,281,306	$2,512,522
Grant.....	Washington Central Branch	35.00												
	Main Track	.....	19.033	$28,588 85	$544,132	$10,006 10	$190,446	$5,411 95	$103,006	$1,894 18	$36,052	$647,138	$226,498
	Sidings	.....	2.877	8,168 24	23,500	2,858 88	8,225	1,546 27	4,449	541 19	1,557	27,949	9,782
	Other Branch Lines—													
	Main Track	.....	66.183	24,504 73	1,621,797	8,576 66	567,629	4,638 81	307,010	1,623 58	107,454	1,928,807	675,083
	Sidings	.....	3.840	4,084 12	15,683	1,429 44	5,489	773 14	2,969	270 00	1,039	18,652	6,528
	Totals.....	.....	91.933	.....	$2,205,112	.....	$771,789	.....	$417,434	.....	$146,102	$2,622,546	$917,891

NORTHERN PACIFIC RAILWAY—Continued.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Grays Harb'r	Grays Harbor B'ch..	41.00											
	Main Track		41.139	$22,672 97	$1,344,133	$13,395 92	$551,095	$6,185 08	$254,448	$2,535 88	$104,323	$1,598,581	$655,418
	2nd Main Track		1.350	16,336 48	22,054	6,607 96	9,042	3,092 55	1,175	1,267 95	1,712	26,229	10,754
	Sidings		19.271	8,168 24	157,410	3,348 98	64,538	1,546 27	29,796	633 97	12,217	187,208	76,755
	Other Branch Lines—												
	Main Track		57.446	24,504 73	1,407,609	10,046 94	577,157	4,638 81	266,481	1,901 91	109,257	1,674,189	686,414
	Sidings		13.278	4,084 12	54,229	1,674 49	22,234	773 14	10,266	316 99	4,209	64,495	26,443
	Totals		152.484		$2,985,525		$1,224,066		$565,168		$231,718	$3,550,693	$1,455,784
King	Main Line	47.00											
	Main Track		108.873	$81,682 42	$8,893,010	$38,390 74	$4,179,713	$15,462 72	$1,683,473	$7,267 48	$791,232	$10,576,483	$4,970,947
	2nd Main Track		26.681	24,504 73	898,858	11,517 22	422,463	4,638 81	170,156	2,180 24	79,973	1,069,014	502,436
	Sidings		156.218	16,336 48	2,552,052	7,678 15	1,199,465	3,092 55	483,112	1,453 50	227,063	3,035,164	1,426,528
	Buckley Branch—												
	Main Track		12.237	28,588 85	349,842	13,436 76	164,426	5,411 95	66,226	2,543 62	31,126	416,068	195,552
	Sidings		9.419	8,168 24	76,937	3,839 07	36,160	1,546 27	14,564	726 75	6,845	91,501	43,005
	Other Branch Lines—												
	Main Track		78.525	24,504 73	1,924,234	11,517 22	904,200	4,638 81	364,263	2,180 24	171,203	2,288,497	1,075,593
	Sidings		19.170	4,084 12	78,293	1,919 54	36,798	773 14	14,821	363 38	6,966	93,114	43,764
	Totals		421.123		$14,773,226		$6,943,417		$2,796,615		$1,314,408	$17,569,841	$8,257,825
Kittitas	Main Line	41.00											
	Main Track		73.193	$81,682 42	$5,978,581	$33,489 70	$2,451,218	$15,462 72	$1,131,703	$6,339 72	$464,023	$7,110,344	$2,915,241
	2nd Main Track		8.462	24,504 73	207,359	10,046 94	85,017	4,638 81	39,254	1,901 91	16,094	246,615	101,111
	Sidings		60.432	16,336 48	987,246	6,697 96	404,771	3,092 55	186,889	1,267 95	76,625	1,174,135	481,396
	Branch Lines—												
	Main Track		7.195	24,504 73	176,312	10,046 94	72,288	4,638 81	33,376	1,901 91	13,684	209,688	85,972
	Sidings		8.096	4,084 12	33,065	1,674 49	13,557	773 14	6,259	316 99	2,566	39,324	16,123
	Totals		157.378		$7,382,563		$3,026,851		$1,397,541		$572,992	$8,780,104	$3,599,843

Lewis.....	Main Line	30.60											
	Main Track	.....	28.431	$81,692 42	$2,322,313	$29,403 67	$836,033	$15,462 72	$439,621	$5,366 58	$158,263	$2,761,934	$994,296
	2nd Main Track....	.....	*30.864	24,504 73	756,314	8,821,70	272,275	4,638 81	143,172	1,622 97	51,542	899,468	323,815
	Sidings	.....	28.798	16,336 48	470,458	5,881 13	169,365	3,092 55	89,039	1,113 32	32,051	559,517	201,426
	Grays Harbor B'ch—												
	Main Track	.....	3.960	22,672 97	130,033	11,702 27	46,814	6,185 08	24,617	1,226 62	8,862	154,653	55,676
	Sidings	.....	1.996	8,168 24	16,304	2,940 57	5,869	1,546 27	3,086	556 66	1,111	19,390	6,980
	South Bend Branch—												
	Main Track	.....	20.179	28,568 85	748,427	10,291 09	269,434	5,411 95	141,629	1,948 30	51,085	891,106	320,439
	Sidings	.....	5.788	8,168 24	47,278	2,949 57	17,079	1,546 27	8,950	556 66	3,222	56,228	20,242
	Other Branch Lines—												
	Main Track	.....	7.236	24,504 73	177,316	8,821 70	63,834	4,638 81	33,568	1,669 97	12,084	210,882	75,918
	Sidings	.....	2.478	4,084 12	10,120	1,470 28	3,644	773 14	1,916	278 33	690	12,036	4,333
	Totals.....	.....	135.750	.....	$4,678,508	.....	$1,084,295	.....	$885,698	.....	$318,849	$5,564,234	$2,003,125
Lincoln.....	Main Line	28.00											
	Main Track	.....	16.618	$81,692 42	$1,357,209	$31,039 32	$515,811	$15,462 72	$256,950	$5,875 83	$97,645	$1,614,358	$613,457
	Sidings	.....	5.903	16,336 48	96,434	6,707 80	30,645	3,092 55	18,255	1,175 17	6,937	114,029	43,332
	Washington Central Branch—												
	Main Track	.....	66.104	28,568 85	1,889,877	10,863 76	718,138	5,411 95	357,751	2,056 54	135,946	2,247,538	854,064
	Sidings	.....	7.698	8,168 24	57,978	3,103 93	22,032	1,546 27	10,973	587 58	4,171	68,953	26,203
	Other Branch Lines—												
	Main Track	.....	17.925	24,504 73	439,198	9,311 80	166,895	4,638 81	83,141	1,762 75	31,564	522,339	198,489
	Sidings	.....	1.047	4,084 12	4,276	1,551 97	1,625	773 14	809	293 79	308	5,085	1,933
	Totals.....	.....	114.695	.....	$3,845,122	.....	$1,461,146	.....	$727,880	.....	$276,601	$4,573,012	$1,737,747
Mason.....	Branch Lines	41.00											
	Main Track	.....	.825	$24,504 73	$20,216	$10,046 94	$8,288	$4,638 81	$3,827	$1,901 91	$1,569	$24,043	$9,856
	Sidings	.....	.090	4,084 12	368	1,674 49	151	773 14	70	316 99	28	438	179
	Totals.....	.....	.915	.....	$20,584	.....	$8,440	.....	$3,897	.....	$1,597	$24,481	$10,037
Pacific.....	South Bend Branch..	41.00											
	Main Track	.....	20.486	$28,568 85	$571,617	$11,721 43	$357,393	95,411 95	$165,009	$2,218 90	$67,656	$1,036,617	$425,013
	Sidings	.....	8.617	8,168 24	70,395	3,348 98	28,858	1,546 27	13,324	633 97	5,463	83,709	34,321
	Totals.....	.....	29.103	.....	$642,002	.....	$386,221	.....	$178,324	.....	$73,113	$1,120,326	$459,334

*Contains 2.433 miles 3d main track.

NORTHERN PACIFIC RAILWAY—Continued.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rat per mile	Equalized value	Actual value	Equalized value
Pierce	Main Line	43.00											
	Main Track		42.417	$81,682 42	$3,464,723	$35,122 44	$1,489,831	$15,402 72	$653,397	$6,648 95	$282,029	$4,120,606	$1,771,860
	2nd Main Track		*41.539	24,304 73	1,017,902	10,537 03	437,698	4,638 81	192,692	1,994 69	82,857	1,210,594	520,555
	Sidings		80.589	16,336 48	1,316,394	7,024 60	566,050	3,092 55	249,196	1,329 80	107,150	1,565,592	673,205
	Prairie Line Branch—												
	Main Track		22.230	22,672 97	729,568	14,049 38	313,743	6,185 08	139,113	2,650 58	59,398	867,701	373,111
	2nd Main Track		4.811	16,336 48	78,595	7,024 60	33,790	3,092 55	14,878	1,329 80	6,396	93,473	40,194
	Sidings		34.512	8,168 24	281,902	3,512 34	121,218	1,546 27	53,366	664 90	22,947	335,267	144,165
	Buckley Branch—												
	Main Track		21.307	28,588 85	609,143	12,293 21	261,931	5,411 95	115,312	2,327 14	49,584	734,456	311,515
	2nd Main Track		1.625	16,336 48	24,913	7,024 60	10,713	3,092 53	4,716	1,329 80	2,029	29,629	12,741
	Sidings		5.943	8,168 24	48,544	3,512 34	20,874	1,546 27	9,190	664 90	3,953	57,734	24,826
	Olympia Branch—												
	Main Track		11.596	28,588 85	331,543	12,293 21	142,564	5,411 95	62,763	2,327 14	26,984	394,306	169,548
	Sidings		12.098	8,168 24	98,819	3,512 34	42,492	1,546 27	18,707	664 90	8,044	117,526	50,536
	Other Branch Lines—												
	Main Track		36.004	24,504 73	882,294	10,537 03	379,373	4,638 81	167,016	1,994 69	71,817	1,049,334	451,191
	Sidings		7.718	4,084 12	31,521	1,756 11	13,554	773 14	5,967	332 45	2,566	37,488	16,120
	Totals		322.381		$8,915,857		$3,833,819		$1,687,800		$725,753	$10,603,657	$4,559,572
Skagit	Main Line	35.00											
	Main Track		29.320	$81,682 42	$2,394,923	$28,588 85	$838,225	$15,402 72	$453,367	$5,411 95	$158,678	$2,848,296	$996,903
	Sidings		13.657	16,336 48	223,107	5,717 77	780,088	3,092 55	42,238	1,082 39	14,782	265,342	92,870
	Totals		42.977		$2,618,036		$916,313		$495,602		$173,460	$3,113,638	$1,089,773
Snohomish	Main Line	41.00											
	Main Track		42.532	$81,682 42	$3,474,117	$33,480 79	$1,424,388	$15,402 72	$657,699	$6,339 72	$269,641	$4,131,777	$1,694,029
	Sidings		12.726	16,336 48	207,898	6,697 96	85,238	3,092 55	39,350	1,267 95	16,136	247,254	101,374
	Everett Branch—												
	Main Track		11.373	28,588 85	325,141	11,721 43	133,308	5,411 95	61,559	2,218 90	25,236	386,691	158,544
	Sidings		13.251	8,168 24	108,237	3,348 98	44,377	1,546 27	20,499	633 97	8,401	128,727	52,778
	Other Branch Lines—												
	Main Track		75.120	24,504 73	1,840,795	10,046 94	754,796	4,638 81	348,467	1,901 91	142,871	2,189,262	897,597
	Sidings		11.167	4,084 12	45,607	1,674 49	18,699	773 14	8,634	316 99	3,540	54,241	22,239
	Totals		166.169		$6,001,795		$2,460,736		$1,136,157		$465,825	$7,137,952	$2,926,561

* Contains 1.251 miles of 3rd main line track.

Spokane....	Main Line	40.00											
	Main Track		48.774	$81,082 42	$3,963,978	$32,672 97	$1,593,591	$15,462 72	$754,179	$6,185 09	$301,672	$4,738,197	$1,895,263
	2nd Main Track		21.684	24,504 73	531,361	9,801 89	212,544	4,638 81	100,585	1,855 52	40,235	631,949	252,779
	Sidings		63.905	16,336 48	1,043,983	6,534 59	417,593	3,092 55	197,630	1,237 02	79,052	1,241,613	496,645
	Palouse & Lewiston Branch—												
	Main Track		25.044	32,672 97	818,262	13,009 19	327,305	6,185 08	154,899	2,474 03	61,960	973,161	389,265
	Sidings		3.351	8,168 24	27,372	3,267 30	10,949	1,546 27	5,181	618 51	2,073	32,553	13,022
	Washington Central Branch—												
	Main Track		23.675	28,588 85	676,841	11,435 54	270,736	5,411 95	128,128	2,164 78	51,251	804,969	321,987
	Sidings		2.950	8,168 24	24,097	3,267 30	9,638	1,546 27	4,561	618 51	1,825	28,658	11,463
	Totals		189.383		$7,105,894		$2,842,356		$1,345,166		$538,068	$8,451,060	$3,380,424
Thurston....	Main Line	39.00											
	Main Track		25.188	$81,082 42	$2,057,417	$31,856 14	$802,392	$15,462 72	$389,475	$6,050 46	$151,895	$2,446,892	$954,287
	2nd Main Track		25.188	24,504 73	617,225	9,556 84	240,718	4,638 81	116,842	1,809 14	45,569	734,067	286,287
	Sidings		7.277	16,336 48	118,881	6,371 23	46,363	3,092 55	22,505	1,206 09	8,777	141,386	55,140
	Prairie Line Branch—												
	Main Track		17.164	32,672 97	560,799	12,742 46	218,712	6,185 08	106,161	2,412 18	41,403	666,960	260,115
	Sidings		5.900	8,168 24	48,193	3,185 61	18,795	1,546 27	9,123	603 05	3,558	57,316	22,353
	Grays Harbor Br'ch—												
	Main Track		10.123	32,672 97	330,749	12,742 46	128,992	6,185 08	62,611	2,412 18	24,419	393,300	153,411
	Sidings		2.902	8,168 24	24,194	3,185 61	9,436	1,546 27	4,580	603 05	1,789	28,774	11,222
	Olympia Branch—												
	Main Track		28.441	28,588 85	813,095	11,149 65	317,107	5,411 95	153,921	2,110 66	60,029	967,016	377,136
	Sidings		11.563	8,168 24	94,495	3,185 61	36,831	1,546 27	17,926	603 05	6,991	112,621	43,922
	Other Branch Lines—												
	Main Track		1.523	24,504 73	37,321	9,556 84	14,555	4,638 81	7,065	1,809 14	2,755	44,386	17,310
	Totals		135.359		$4,702,569		$1,834,001		$890,209		$347,182	$5,592,778	$2,181,183
Walla Walla	Wallula Branch	39.00											
	Main Track		11.602	$28,588 85	$331,688	$11,149 65	$129,358	$5,411 95	$62,789	$2,110 66	$24,488	$394,477	$153,846
	Sidings		2.765	8,168 24	22,585	3,185 61	8,808	1,546 27	4,276	603 05	1,667	26,861	10,475
	Dayton Branch—												
	Main Track		78.012	28,588 85	2,230,274	11,149 65	869,807	5,411 95	422 197	2,110 66	164,657	2,652,471	1,024,464
	Sidings		13.404	8,168 24	109,487	3,185 61	42,700	1,546 27	20,726	603 05	8,083	130,213	50,783
	Other Branch Lines—												
	Main Track		36.536	24,504 73	895,305	9,556 84	349,169	4,638 81	169,484	1,809 14	66,099	1,064,789	415,268
	Sidings		3.105	4,084 12	12,681	1,592 81	4,946	773 14	2,401	301 52	936	15,082	5,882
	Totals		145.424		$3,602,020		$1,404,788		$681,873		$265,930	$4,283,893	$1,670,718

NORTHERN PACIFIC RAILWAY—Continued.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Whatcom....	Main Line	40.00											
	Main Track		28.949	$81,682 42	$2,364,624	$32,672 97	$945,850	$15,462 72	$447,630	$6,185 09	$179,052	$2,812,254	$1,124,902
	Sidings		4.583	16,336 48	74,870	6,534 59	29,948	3,092 55	14,173	1,237 02	5,669	89,043	35,617
	Bellingham Branch—												
	Main Track		22.738	28,588 85	650,053	11,435 54	260,021	5,411 95	123,057	2,164 78	49,223	773,110	309,244
	Sidings		7.107	8,168 24	58,052	3,267 30	23,221	1,546 27	10,989	618 51	4,396	69,041	27,617
	Totals.....		63.377	.....	$3,147,599	.....	$1,259,040	.....	$595,849	.....	$238,340	$3,743,448	$1,497,380
Whitman...	Palouse & Lewiston Branch—	37.00											
	Main Track		58.001	$32,672 97	$1,927,411	$12,089 00	$713,142	$6,185 08	$364,864	$2,288 48	$135,000	$2,292,275	$848,142
	Sidings		9.868	8,168 24	80,604	3,022 25	29,823	1,546 27	15,259	572 12	5,646	95,863	35,469
	Other Branch Lines—												
	Main Track		34.274	24,504 73	839,975	9,066 75	310,754	4,638 81	158,991	1,716 36	58,826	998,966	369,586
	Sidings		4.001	4,084 12	16,341	1,511 12	6,046	773 14	3,093	286 06	1,145	19,434	7,191
	Totals.....		107.134	.....	$2,864,231	.....	$1,059,765	.....	$542,207	.....	$200,617	$3,406,438	$1,260,382
Yakima.....	Main Line	44.00											
	Main Track		35.610	$81,682 42	$4,542,350	$35,940 26	$1,908,688	$15,462 72	$859,892	$6,803 60	$378,348	$5,402,241	$2,376,986
	Sidings		54.187	16,336 48	885,225	7,188 05	389,499	3,092 55	167,576	1,360 72	73,733	1,052,801	463,232
	Branch Lines—												
	Main Track		91.475	24,504 73	2,241,570	10,782 08	986,231	4,638 81	424,335	2,041 08	186,708	2,665,905	1,172,999
	Sidings		26.591	4,084 12	108,601	1,797 01	47,784	773 14	20,559	340 18	9,046	129,160	56,850
	Totals.....		227.863	.....	$7,777,755	.....	$3,422,212	.....	$1,472,352	.....	$647,835	$9,250,107	$4,070,047

Totals....	Main Line—													
	Main Track		701.288	$81,682 42	$57,283,718		$23,009,470	$15,402 72	$10,843,975		$4,480,709	$68,127,693	$28,150,170
	2nd Main Track		221.983	24,504 73	5,437,428		2,238,179	4,638 81	1,029,319		423,603	6,466,747	2,661,872
	Sidings		584.850	16,336 48	9,554,391		4,050,789	3,092 55	1,808,078		766,927	11,363,099	4,817,616
	Prairie Line Branch—													
	Main Track		39.494	32,672 97	1,290,887		532,435	6,185 08	244,274		100,791	1,534,661	633,226
	2nd Main Track		4.811	16,336 48	78,595		33,700	3,092 55	14,878		6,348	93,473	40,191
	Sidings		40.412	8,168 24	330,095		140,013	1,546 27	62,488		26,505	392,583	166,518
	Grays Harbor B'ch—													
	Main Track		55.243	32,672 97	1,804,920		725,901	6,185 08	341,676		137,604	2,146,596	864,595
	2nd Main Track		1.359	16,336 48	22,054		9,042	3,092 55	4,175		1,712	26,229	10,454
	Sidings		24.229	8,168 24	197,908		79,843	1,546 27	37,464		15,114	235,372	94,957
	Palouse & Lewiston Branch—													
	Main Track		84.035	32,672 97	2,745,673		1,040,447	6,185 08	519,763		196,960	3,265,436	1,227,407
	Sidings		13.219	8,168 24	107,976		40,772	1,546 27	20,440		7,719	128,416	48,491
	Everett Branch—													
	Main Track		11.373	28,588 85	325,141		133,308	5,411 95	61,550		25,256	386,601	158,344
	Sidings		13.251	8,168 24	108,237		44,377	1,546 27	20,490		8,401	128,727	52,778
	Buckley Branch—													
	Main Track		33.544	28,588 85	958,985		426,357	5,411 95	181,539		80,710	1,140,324	507,067
	2nd Main Track		1.525	16,336 48	24,913		10,713	3,092 55	4,716		2,028	31,629	12,741
	Sidings		15.302	8,168 24	125,481		57,034	1,546 27	23,754		10,707	149,235	67,831
	Olympia Branch—													
	Main Track		40.038	28,588 85	1,144,640		459,671	5,411 95	216,684		87,017	1,361,324	546,688
	Sidings		23.691	8,168 24	193,514		79,423	1,546 27	36,633		15,035	230,147	94,458
	South Bend Branch—													
	Main Track		56.667	28,588 85	1,620,044		626,707	5,411 95	306,679		118,655	1,926,723	745,432
	Sidings		14.405	8,168 24	117,663		45,878	1,546 27	22,274		8,685	139,937	54,563
	Washington Central Branch—													
	Main Track		108.812	28,588 85	3,110,810		1,179,320	5,411 95	588,885		223,240	3,699,695	1,402,369
	Sidings		12.925	8,168 24	105,575		39,805	1,546 27	19,985		7,553	125,560	47,448
	Wallula Branch—													
	Main Track		13.265	28,588 85	378,945		146,261	5,411 95	71,735		28,069	450,680	176,327
	Sidings		2.969	8,168 24	24,251		9,475	1,546 27	4,591		1,793	28,842	11,268
	Dayton Branch—													
	Main Track		86.203	28,588 85	2,464,445		947,083	5,411 95	466,526		179,286	2,930,971	1,126,309
	Sidings		15.031	8,168 24	130,128		49,512	1,546 27	24,634		9,372	154,762	58,884
	Bellingham Branch—													
	Main Track		22.738	28,588 85	650,053		260,021	5,411 95	123,057		49,223	773,110	309,244
	Sidings		7.107	8,168 24	58,052		23,221	1,546 27	10,989		4,396	69,041	27,617
	All Other Branch Lines—													
	Main Track		609.320	24,504 73	14,931,222		6,056,214	4,638 81	2,826,520		1,152,135	17,757,742	7,238,340
	Sidings		110.799	4,084 12	452,516		190,270	773 14	85,663		36,018	538,179	236,288
	Totals		2,070.748		$105,777,760		$43,378,517		$20,024,634		$8,211,678	$125,801,794	$51,500,195

NORTHERN PACIFIC RAILWAY—Continued.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
EQUIPMENT (ONLY) OVER FOREIGN LINES.													
Franklin.....	Branch Lines	40.00											
	(Over S., P. & S.)												
	Main Track	.....	24.838	.....	.....	.....	.....	$4,638 81	$115,219	$1,855 52	$46,088	$115,219	$46,088
	Sidings	.....	3.377	.....	.....	.....	.....	773 14	2,611	309 26	1,044	2,611	1,044
	Totals.....	.....	28.215	.....	.....	.....	.....	.....	$117,830	.....	$47,132	$117,830	$47,132
Grays Harb'r	Branch Lines	41.00											
	(Over O.-W. R. R. & N. Co.)												
	Main Track	.....	1.730	.....	.....	.....	.....	$4,638 81	$8,025	$1,001 91	$3,290	$8,025	$3,290
	2nd Main Track....	.....	1.650	.....	.....	.....	.....	1,546 27	2,551	633 97	1,046	2,551	1,046
	Sidings	.....	4.160	.....	.....	.....	.....	773 14	3,216	316 99	1,319	3,216	1,319
	Totals.....	.....	7.540	.....	.....	.....	.....	.....	$13,792	.....	$5,655	$13,792	$5,655
Lewis.....	Branch Lines	36.00											
	(Over O.-W. R. R. & N. Co.)												
	Main Track	.....	1.420	.....	.....	.....	.....	$4,638 81	$6,587	$1,669 97	$2,371	$6,587	$2,371
Snohomish..	Main Line	41.00											
	(Over G. N. Ry.)												
	Main Track	.....	11.565	.....	.....	.....	.....	$15,462 72	$178,826	$6,339 72	$73,319	$178,826	$73,319
	Sidings	.....	.755	.....	.....	.....	.....	3,092 55	2,335	1,267 95	957	2,335	957
	Totals.....	.....	12.320	.....	.....	.....	.....	.....	$181,161	.....	$74,276	$181,161	$74,276
Whitman....	Branch Lines	37.00											
	(Over O.-W. R. R. & N. Co.)												
	Main Track	.....	70.500	.....	.....	.....	.....	$4,638 81	$327,036	$1,716 36	$121,003	$327,036	$121,003
	Sidings	.....	9.700	.....	.....	.....	.....	773 14	7,500	288 06	2,775	7,500	2,775
	Totals.....	.....	80.200	.....	.....	.....	.....	.....	$334,536	.....	$123,778	$334,536	$123,778

Totals....	Main Line—												
	Main Track		11.505					$15,462 72	$178,826		$73,319	$178,826	$73,319
	Sidings		.755					3,092 55	2,335		957	2,335	957
	Branch Lines—												
	Main Track		98.488					4,638 81	456,867		172,752	456,867	172,752
	2nd Main Track		1.650					1,546 27	2,551		1,046	2,551	1,046
	Sidings		17.237					773 14	13,327		5,138	13,327	5,138
	Totals		129.695						$653,906		$253,212	$653,906	$253,212
Track and Equipment			2,970.748		$105,777,760		$43,378,517		$20,024,034		$8,211,678	$125,801,794	$51,590,195
Equipment (only) over Foreign Lines			129.695						653,906		253,212	653,906	253,212
Totals			3,100.443		$105,777,760		$43,378,517		$20,677,940		$8,464,890	$126,455,700	$51,843,407

OREGON-WASHINGTON RAILROAD & NAVIGATION COMPANY.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Adams.....	Main Line	40.00											
	Main Track		41.150	$83,505 46	$3,438,719	$33,426 18	$1,375,487	$4,743 58	$195,198	$1,897 43	$78,079	$3,633,917	$1,453,566
	Sidings		7.030	16,713 10	117,493	6,685 24	46,997	948 72	6,669	379 49	2,668	124,162	49,665
	Branch Lines—												
	Main Track		9.190	25,069 65	230,390	10,027 86	92,156	1,423 07	13,078	569 23	5,231	243,468	97,387
	Sidings		1.080	4,178 27	4,513	1,671 31	1,805	237 18	256	94 87	103	4,769	1,908
	Totals.....		58.450	.....	$3,791,115	.....	$1,516,445	.....	$215,201	.....	$86,081	$4,006,316	$1,602,526
Benton.....	Yakima Branch	40.00											
	Main Track		48.660	$33,426 19	$1,626,518	$13,370 48	$650,608	$1,897 43	$92,329	$758 97	$36,931	$1,718,847	$687,539
	Sidings		8.520	8,356 55	71,198	3,342 62	28,479	474 36	4,042	189 74	1,617	75,240	30,096
	Totals.....		57.180	.....	$1,697,716	.....	$679,087	.....	$96,371	.....	$38,548	$1,794,087	$717,635

OREGON-WASHINGTON RAILROAD & NAVIGATION COMPANY—Continued.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Clarke.....	Main Line	34.00											
	Sidings		.720	$16,713 10	$8,691	$5,682 45	$2,955	$948 72	$493	$322 56	$168	$9,184	$3,123
Columbia....	Main Line	33.00											
	Main Track		3.910	$83,565 46	$326,741	$27,576 60	$107,854	$4,743 58	$18,547	$1,565 38	$6,121	$345,288	$113,945
	Sidings		.630	16,713 10	10,529	5,515 32	3,475	948 72	598	313 08	197	11,127	3,672
	Pendleton-Grange City Branch—												
	Main Track		29.020	54,317 55	1,576,296	17,924 70	520,177	3,083 33	89,478	1,017 50	29,528	1,665,774	549,705
	Sidings		6.480	16,713 10	108,301	5,515 32	35,73	948 72	6,147	313 08	2,029	114,448	37,768
	Dayton Branch—												
	Main Track		19.670	33,426 19	657,493	11,030 64	216,97	1,897 43	37,322	626 15	12,316	694,815	229,289
	Sidings		3.960	8,356 55	33,092	2,757 66	10,92	474 39	1,878	156 54	620	34,970	11,540
	Pomeroy Branch—												
	Main Track		13.950	33,426 19	466,295	11,030 64	153,87	1,897 43	26,468	626 15	8,735	492,764	162,613
	Sidings		.740	8,356 55	6,184	2,757 66	2,041	474 39	351	156 54	116	6,535	2,157
	Totals.....		78.360	.....	$3,184,921	.....	$1,051,929	.....	$180,790	.....	$59,692	$3,365,721	$1,110,688
Franklin.....	Main Line	40.00											
	Main Track		7.160	$83,565 46	$598,329	$33,426 18	$239,331	$4,743 58	$33,964	$1,897 43	$13,586	$632,293	$252,917
	Sidings		.570	16,713 10	9,526	6,685 24	3,811	948 72	541	379 49	216	10,067	4,027
	Branch Lines—												
	Main Track		28.620	25,069 65	717,493	10,027 86	286,997	1,423 07	40,728	569 23	16,291	758,221	303,288
	Sidings		1.680	4,178 27	7,661	1,671 31	2,825	237 16	401	94 87	160	7,402	2,985
	Totals.....		38.040	.....	$1,332,409	.....	$532,964	.....	$75,634	.....	$30,253	$1,408,043	$563,217
Garfield.....	Pomeroy Branch	32.00											
	Main Track		16.050	$33,426 19	$536,491	$10,696 28	$171,677	$1,897 43	$30,454	$607 18	$9,745	$566,945	$181,422
	Sidings		2.220	8,356 55	18,551	2,674 10	5,937	474 36	1,053	151 89	337	19,604	6,274
	Totals...		18.270	.....	$555,042	.....	$177,614	.....	$31,507	.....	$10,082	$586,549	$187,696

Grays Harb'r	Grays Harbor B'ch..	41.60											
	Main Track		41.480	$33,426 19	$1,386,518	$13,704 74	$568,473	$1,897 43	$78,705	$777 95	$32,269	$1,465,225	$600,742
	2nd Main Track		1.650	10,713 10	27,577	6,852 37	11,306	948 72	1,565	388 98	642	29,142	11,948
	Sidings		15.870	8,356 55	132,619	3,426 19	54,323	474 36	7,528	194 49	3,087	140,147	57,460
	Other Branch Lines—												
	Main Track		16.886	25,069 65	422,674	10,278 56	173,297	1,423 07	23,906	583 46	9,837	446,067	183,134
	Sidings		2.170	4,178 27	9,067	1,713 09	3,717	237 18	515	97 24	211	9,582	3,928
	Totals		78.030		$1,978,455		$811,166		$112,306		$46,046	$2,090,761	$857,212
King	Main Line	47.90											
	Main Track		9.420	$83,565 46	$787,180	$39,275 77	$360,978	$4,743 58	$44,685	$2,229 48	$21,002	$831,871	$390,980
	2nd Main Track		3.340	25,069 65	83,733	11,782 74	39,354	1,423 07	4,783	668 84	2,234	88,486	41,588
	Sidings		37.210	16,713 10	621,895	7,855 16	262,291	948 72	35,302	445 90	16,592	657,197	308,883
	Totals		49.970		$1,492,814		$701,623		$84,740		$39,828	$1,577,554	$741,451
Lewis	Main Line	36.00											
	Sidings		.090	$16,713 10	$1,504	$6,016 72	$541	$948 72	$85	$341 54	$31	$1,589	$572
	Grays Harbor B'ch												
	Main Track		5.040	33,426 19	168,524	12,038 43	67,809	1,897 43	10,702	683 07	3,852	199,226	71,721
	Sidings		1.050	8,356 55	8,774	3,008 86	3,150	474 36	498	170 77	179	9,272	3,338
	Other Branch Lines—												
	Main Track		2.000	25,069 65	50,139	9,025 07	18,050	1,423 07	2,846	512 31	1,025	52,985	19,075
	Sidings		.626	4,178 27	2,590	1,504 18	932	237 18	147	87 38	53	2,737	985
	Totals		9.400		$251,531		$90,551		$14,278		$5,140	$265,809	$95,671
Lincoln	Main Line	38.00											
	Main Track		7.000	$83,565 46	$584,958	$31,754 87	$222,281	$4,743 58	$53,205	$1,892 56	$12,618	$618,163	$234,902
	Sidings		1.350	16,713 10	22,563	6,350 98	8,574	948 72	1,281	389 51	487	22,844	9,031
	Totals		8.350		$607,521		$230,856		$34,486		$13,105	$642,007	$243,963
Pacific	Branch Lines	41.06											
	Main Track		28.650	$25,069 65	$718,246	$10,278 56	$294,481	$1,423 07	$40,771	$583 46	$10,716	$759,017	$311,197
	Sidings		3.040	4,178 27	12,702	1,713 09	5,208	237 18	721	97 24	295	13,423	5,503
	Totals		31.690		$730,948		$299,689		$41,492		$17,011	$772,440	$316,700
Pierce	Main Line	43.00											
	Main Track		2.840	$83,565 46	$237,326	$35,933 15	$102,050	$4,743 58	$13,472	$2,639 71	$5,793	$250,798	$107,843
	Sidings		8.420	16,713 10	140,724	7,186 63	60,511	948 72	7,988	407 96	3,435	148,712	63,946
	Totals		11.260		$378,050		$162,561		$21,460		$9,228	$399,510	$171,789

OREGON-WASHINGTON RAILROAD & NAVIGATION COMPANY—Continued.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Spokane.....	Main Line	40.00											
	Main Track	.....	33.040	$83,565 46	$2,761,003	$33,426 18	$1,104,401	$4,743 58	$156,728	$1,807 43	$62,691	$2,917,731	$1,167,092
	2nd Main Track.....	.....	1.570	25,069 65	39,359	10,027 86	15,744	1,423 07	2,234	569 23	893	41,593	16,637
	Sidings	.....	8.940	16,713 10	149,415	6,685 24	59,766	948 72	8,482	379 49	3,393	157,897	63,159
	Colfax Branch—												
	Main Track	.....	44.830	62,674 10	2,809,690	25,069 64	1,123,872	3,557 60	159,491	1,423 08	63,797	2,969,171	1,187,669
	Sidings	.....	18.370	16,713 10	307,019	6,685 24	122,808	948 72	17,428	379 49	6,971	324,447	129,779
	Other Branch Lines—												
	Main Track	.....	4.100	25,069 65	102,786	10,027 86	41,114	1,423 07	5,835	569 23	2,334	108,621	43,448
	Sidings	.....	.280	4,178 27	1,170	1,671 31	468	237 18	66	94 87	26	1,236	494
	Totals.....	.....	111.130	.....	$6,170,432	.....	$2,468,173	.....	$350,264	.....	$140,105	$6,520,696	$2,608,278
Thurston....	Main Line	39.00											
	Sidings	.....	.350	$16,713 10	$5,850	$6,518 11	$2,281	$948 72	$332	$370 00	$130	$6,182	$2,411
	Grays Harbor B'ch—												
	Main Track	.....	7.310	33,426 19	244,340	13,036 21	95,295	1,897 43	13,870	740 00	5,409	258,210	100,704
	Sidings	.....	2.970	8,356 55	24,819	3,259 05	9,679	474 36	1,409	185 00	549	26,228	10,228
	Other Branch Lines—												
	Main Track	.....	11.490	25,069 65	288,050	9,777 16	112,340	1,423 07	16,351	555 00	6,377	304,401	118,717
	Sidings	.....	5.790	4,178 27	24,192	1,629 53	9,435	237 18	1,373	92 50	536	25,565	9,971
	Totals.....	.....	27.910	.....	$587,257	.....	$229,030	.....	$33,335	.....	$13,001	$620,592	$242,031
Walla Walla.	Main Line	39.00											
	Main Track	.....	67.640	$83,565 46	$5,652,368	$32,500 53	$2,204,423	$4,743 58	$320,856	$1,850 00	$125,134	$5,973,224	$2,329,557
	Sidings	.....	9.500	16,713 10	159,777	6,518 11	62,313	948 72	9,070	370 00	3,537	168,847	65,850
	Colfax Branch—												
	Main Track	.....	8.810	62,674 10	552,160	24,442 90	215,342	3,557 69	31,343	1,387 50	12,224	583,502	227,566
	Sidings	.....	1.240	16,713 10	21,560	6,518 11	8,408	948 72	1,224	370 00	477	22,784	8,885
	Pendleton-Grange City Branch—												
	Main Track	.....	32.320	54,317 55	1,755,543	21,183 84	684,602	3,083 33	99,653	1,202 50	38,865	1,855,196	723,527
	Sidings	.....	11.470	16,713 10	191,609	6,518 11	74,763	948 72	10,882	370 00	4,244	202,581	79,007
	Dayton Branch—												
	Main Track	.....	5.390	33,426 19	180,167	13,036 21	70,265	1,897 43	10,227	740 00	3,989	190,394	74,254
	Sidings	.....	.600	8,356 55	5,014	3,259 05	1,955	474 36	285	185 00	111	5,299	2,066

	Yakima Branch—												
	Main Track		7.680	$3,426 19	256,713	13,036 21	100,118	1,897 43	14,572	740 00	5,683	271,285	105,801
	Sidings		1.770	8,356 55	14,791	3,259 05	5,760	474 36	840	185 00	327	15,631	6,090
	Other Branch Lines—												
	Main Track		30.930	25,069 65	775,404	9,777 16	302,408	1,423 07	44,016	555 00	17,166	819,420	319,574
	Sidings		1.890	4,178 27	7,897	1,629 53	3,080	237 18	448	92 50	175	8,345	3,255
	Totals		179.350		$9,573,092		$3,733,506		$543,416		$211,932	$10,116,508	$3,945,438
Whitman	Main Line	37.00											
	Main Track		7.180	$3,565 46	$600,000	$30,919 22	$222,000	$4,743 58	$34,059	$1,755 12	$12,602	$634,059	$234,602
	Sidings		.590	16,713 10	9,861	6,183 85	3,648	948 72	560	351 03	207	10,421	3,855
	Colfax Branch—												
	Main Track		103.490	62,674 10	6,486,142	23,189 42	2,399,873	3,557 69	368,186	1,316 35	136,229	6,854,328	2,536,102
	Sidings		14.650	16,713 10	244,847	6,183 85	90,593	948 72	13,899	351 03	5,143	258,740	95,736
	Lewiston Branch—												
	Main Track		70.500	37,604 46	2,651,115	13,913 65	980,912	2,134 61	150,490	789 81	55,682	2,801,605	1,036,534
	Sidings		9.700	8,356 55	81,058	3,091 92	29,992	474 36	4,601	175 51	1,702	85,659	31,694
	Pleasant Valley B'ch—												
	Main Track		47.840	37,604 46	1,798,997	13,913 65	665,629	2,134 61	102,120	789 81	37,785	1,901,117	703,414
	Sidings		6.840	8,356 55	57,159	3,091 92	21,149	474 36	3,245	175 51	1,200	60,404	22,349
	Other Branch Lines—												
	Main Track		43.060	25,069 65	1,094,541	9,275 77	404,980	1,423 07	62,131	526 54	22,989	1,156,672	427,909
	Sidings		6.470	4,178 27	27,033	1,545 96	10,002	237 18	1,535	87 76	568	28,568	10,570
	Totals		310.920		$13,050,753		$4,828,778		$740,826		$274,107	$13,791,579	$5,102,885
Yakima	Yakima Branch	44.00											
	Main Track		41.730	$3,426 19	$1,394,875	$14,707 52	$613,745	$1,897 43	$79,180	$834 87	$34,839	$1,474,055	$648,584
	Sidings		18.200	8,356 55	152,089	3,676 88	66,919	474 36	8,633	208 72	3,790	160,722	70,718
	Other Branch Lines—												
	Main Track		2.780	25,069 65	69,694	11,030 65	30,665	1,423 07	3,956	626 15	1,741	73,650	32,403
	Sidings		1.710	4,178 27	7,145	1,838 44	3,144	237 18	406	104 36	178	7,551	3,322
	Totals		64.420		$1,623,803		$714,473		$92,175		$40,557	$1,715,978	$755,030
Totals	Main Line—												
	Main Track		179.340	$3,565 46	$14,936,630		$5,947,778	$4,743 58	$850,714		$337,626	$15,837,344	$6,285,404
	2nd Main Track		4.910	25,069 65	123,092		55,008	1,423 07	6,987		3,127	130,079	53,225
	Sidings		75.260	16,713 10	1,257,828		547,163	948 72	71,401		31,061	1,329,229	578,224
	Colfax Branch—												
	Main Track		157.130	62,674 10	9,847,981		3,739,087	3,557 69	559,020		212,250	10,407,001	3,951,337
	Sidings		34.310	16,713 10	573,426		221,809	948 72	32,551		12,591	605,977	234,400
	Pendleton-Grange City Branch—												
	Main Track		61.340	54,317 55	3,331,839		1,204,839	3,083 33	189,131		68,393	3,520,970	1,273,232
	Sidings		17.950	16,713 10	300,000		110,502	948 72	17,029		6,273	317,029	116,775

OREGON-WASHINGTON RAILROAD & NAVIGATION COMPANY—Continued.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Totals.... (Concluded)	Lewiston Branch—												
	Main Track	.....	70.500	$37,604 46	$2,651,115	.....	$980,912	$2,134 61	$150,490	.....	$55,682	$2,801,605	$1,036,594
	Sidings	.....	9.790	8,356 55	81,058	.....	29,992	474 36	4,601	.....	1,702	85,659	31,694
	Pleasant Valley B'ch—												
	Main Track	.....	47.840	37,604 46	1,798,937	.....	665,629	2,124 61	102,120	.....	37,785	1,901,117	703,414
	Sidings	.....	6.840	8,356 55	57,159	.....	21,149	474 36	3,245	.....	1,200	60,404	22,349
	Yakima Branch—												
	Main Track	.....	98.070	33,426 19	3,278,106	.....	1,364,471	1,897 43	185,081	.....	77,453	3,464,187	1,441,924
	Sidings	.....	28.490	8,356 55	238,078	.....	101,167	474 36	13,515	.....	5,743	251,593	106,910
	Dayton Branch—												
	Main Track	.....	25.000	33,426 19	837,660	.....	287,238	1,897 43	47,549	.....	16,305	885,209	303,543
	Sidings	.....	4.560	8,356 55	38,106	.....	12,875	474 36	2,163	.....	731	40,269	13,606
	Pomeroy Branch—												
	Main Track	.....	30.000	33,426 19	1,002,786	.....	325,554	1,897 43	56,923	.....	18,480	1,059,709	344,034
	Sidings	.....	2.960	8,356 55	24,735	.....	7,978	474 36	1,404	.....	453	26,139	8,431
	Grays Harbor B'ch—												
	Main Track	.....	54.430	33,426 19	1,819,388	.....	731,637	1,897 43	103,277	.....	41,530	1,922,665	773,167
	2nd Main Track	.....	1.650	16,713 10	27,577	.....	11,306	948 72	1,565	.....	642	29,142	11,948
	Sidings	.....	19.890	8,356 55	166,212	.....	67,211	474 36	9,435	.....	3,815	175,647	71,026
	Other Branch Lines—												
	Main Track	.....	178.280	25,069 65	4,469,417	.....	1,756,488	1,423 07	253,705	.....	99,707	4,723,122	1,856,195
	Sidings	.....	24.740	4,178 27	103,370	.....	40,616	237 18	5,868	.....	2,305	109,238	12,921
	Totals	.....	1,133.250	.....	$47,014,560	.....	$18,230,493	.....	$2,668,774	.....	$1,034,854	$49,683,334	$19,265,353
EQUIPMENT (ONLY) OVER FOREIGN LINES.													
Clarke.....	Main Line (Over N. P. and S., P. & S.)	34.00											
	Main Track	.....	17.380	.....	.....	.....	.....	$4,743 58	$82,443	$1,612 32	$28,031	$82,443	$28,031
	2nd Main Track	.....	17.380	.....	.....	.....	.....	1,423 07	24,733	483 84	8,409	24,733	8,409
	Sidings	.....	6.860	.....	.....	.....	.....	948 72	6,508	322 56	2,213	6,508	2,213
	Totals	.....	41.620	.....	.....	.....	.....	.....	$113,684	.....	$38,653	$113,684	$38,653
Columbia....	Branch Lines (Over N. P. Ry.)	33.00											
	Sidings	.....	.200	.....	.....	.....	.....	$237 18	$47	$78 27	$16	$47	$16

Cowlitz.....	Main Line	43.00											
	(Over N. P. Ry.)												
	Main Track	.....	40.180	.....	.....	.....	.....	$4,743 58	$190,597	$2,039 74	$81,967	$190,597	$81,967
	2nd Main Track...	.....	40.180	.....	.....	.....	.....	1,423 07	57,179	611 92	24,587	57,179	24,587
	Sidings	.....	7.600	.....	.....	.....	.....	948 72	7,267	407 95	3,125	7,267	3,125
	Totals.....	.....	88.020	.....	.....	.....	.....	.....	$255,043	.....	$109,679	$255,043	$109,679
Grays Harb'r	Branch Lines	41.00											
	(Over N. P. Ry.)												
	Main Track	.....	3.500	.....	.....	.....	.....	$1,423 07	$4,981	$583 46	$2,042	$4,981	$2,042
	2nd Main Track...	.....	1.350	.....	.....	.....	.....	474 36	640	194 49	263	640	263
	Sidings	.....	16.030	.....	.....	.....	.....	237 18	3,802	97 24	1,559	3,802	1,559
	Totals.....	.....	20.880	.....	.....	.....	.....	.....	$9,423	.....	$3,864	$9,423	$3,864
King.....	Main Line	47.00											
	(Over C., M. & St. P. Ry.)												
	Main Track	.....	15.360	.....	.....	.....	.....	$4,743 58	$72,861	$2,229 48	$34,245	$72,861	$34,245
	Sidings	.....	8.760	.....	.....	.....	.....	948 72	8,311	445 90	3,906	8,311	3,906
	(Over N. P. Ry.)												
	Sidings	.....	.320	.....	.....	.....	.....	948 72	304	445 90	143	304	143
	Totals.....	.....	24.440	.....	.....	.....	.....	.....	$81,476	.....	$38,294	$81,476	$38,294
Lewis.....	Main Line	36.00											
	(Over N. P. Ry.)												
	Main Track	.....	28.430	.....	.....	.....	.....	$4,743 58	$134,860	$1,707 09	$48,550	$134,860	$48,550
	2nd Main Track...	.....	30.870	.....	.....	.....	.....	1,423 07	43,930	512 31	15,815	43,930	15,815
	Sidings	.....	28.610	.....	.....	.....	.....	948 72	27,143	341 54	9,771	27,143	9,771
	Branch Lines—												
	Main Track	.....	1.600	.....	.....	.....	.....	1,423 07	2,277	512 31	820	2,277	820
	Sidings	.....	1.160	.....	.....	.....	.....	237 18	275	85 38	99	275	99
	Totals.....	.....	90.670	.....	.....	.....	.....	.....	$208,485	.....	$75,055	$208,485	$75,055
Pierce.....	Main Line	43.00											
	(Over C., M. & St, P. Ry.)												
	Main Track	.....	10.960	.....	.....	.....	.....	$4,743 58	$51,960	$2,039 74	$22,356	$51,960	$22,356
	Sidings	.....	4.420	.....	.....	.....	.....	948 72	4,193	407 95	1,803	4,193	1,803
	(Over N. P. Ry.)												
	Main Track	.....	26.950	.....	.....	.....	.....	4,743 58	127,840	2,039 74	54,971	127,840	54,971
	2nd Main Track....	.....	26.570	.....	.....	.....	.....	1,423 07	37,811	611 92	16,259	37,811	16,259
	Sidings	.....	10.850	.....	.....	.....	.....	948 72	10,294	407 95	4,426	10,294	4,423

OREGON-WASHINGTON RAILROAD & NAVIGATION COMPANY—Concluded.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Pierce..... (Concluded)	Branch Lines—												
	Main Track	.....	5.770	.....	.....	.....	.....	1,423 07	9,634	611 92	4,142	9,634	4,142
	2nd Main Track....	.....	.480	.....	.....	.....	.....	474 36	228	203 97	98	228	98
	Sidings	.....	24.220	.....	.....	.....	.....	237 18	5,745	101 99	2,470	5,745	2,470
	Totals.....	.....	111.220	.....	.....	.....	.....	.....	$247,735	.....	$106,526	$247,735	$106,523
Spokane.....	Main Line ..... (Over C., M. & St. P. Ry.)	40.00											
	Main Track	.....	1.700	.....	.....	.....	.....	$4,743 58	$8,064	$1,897 43	$3,226	$8,064	$3,226
	2nd Main Track....	.....	1.640	.....	.....	.....	.....	1,423 07	2,334	569 23	934	2,334	934
	Sidings	.....	.120	.....	.....	.....	.....	948 72	114	379 49	45	114	45
	(Over N. P. Ry.)												
	Sidings	.....	.810	.....	.....	.....	.....	946 72	768	379 49	307	768	307
	Totals.....	.....	4.270	.....	.....	.....	.....	.....	$11,280	.....	$4,512	$11,280	$4,512
Thurston....	Main Line ..... (Over N. P. Ry.)	39.00											
	Main Track	.....	25.190	.....	.....	.....	.....	$4,743 58	$119,491	$1,850 00	$46,602	$119,491	$46,602
	2nd Main Track....	.....	25.190	.....	.....	.....	.....	1,423 07	35,847	555 00	13,980	35,847	13,980
	Sidings	.....	7.280	.....	.....	.....	.....	948 72	6,907	370 00	2,694	6,907	2,694
	Totals.....	.....	57.660	.....	.....	.....	.....	.....	$162,245	.....	$63,276	$163,245	$63,276
Walla Walla.	Branch Lines ..... (Over N. P. Ry.)	39.00											
	Sidings	.....	1.650	.....	.....	.....	.....	$237 18	$249	$92 50	$97	$249	$97
Yakima.....	Main Line ..... (Over N. P. Ry.)	44.00											
	Sidings	.....	1.580	.....	.....	.....	.....	$948 72	$1,490	$417 44	$660	$1,490	$660

Totals....	Main Line—												
	Main Track	.....	166.150	.....	.....	.....	.....	$4,743 58	$788,146	.....	$319,938	$788,146	$319,938
	2nd Main Track....	.....	141.830	.....	.....	.....	.....	1,423 07	201,834	.....	79,984	201,834	79,984
	Sidings	.....	77.270	.....	.....	.....	.....	948 72	73,308	.....	29,093	73,308	29,093
	Branch Lines—												
	Main Track	.....	11.870	.....	.....	.....	.....	1,423 07	16,892	.....	7,005	16,892	7,005
	2nd Main Track....	.....	1.830	.....	.....	.....	.....	474 36	868	.....	361	868	361
	Sidings	.....	42.000	.....	.....	.....	.....	237 18	10,118	.....	4,241	10,118	4,241
	Totals.....	.....	441.610	.....	.....	.....	.....	.....	$1,091,166	.....	$440,622	$1,091,166	$440,622
Track and Equipment.....			1,133.250	.....	$47,014,560	.....	$18,230,490	.....	$2,668,774	.....	$1,034,854	$49,683,334	$19,265,353
Equipment (only) over Foreign Lines.....			441.610	.....	.....	.....	.....	.....	1,091,166	.....	440,622	1,091,166	440,622
Totals.....			1,574.860	.....	$47,014,560	.....	$18,230,490	.....	$3,759,940	.....	$1,475,476	$50,774,500	$19,705,975

OREGON TRUNK RAILWAY.

COUNTIES	CLASSIFICATION OF TRACK	Ass'd ratio to actual value (Pct.)	Mileage	REAL PROPERTY Right-of-Way and Tracks				PERSONAL PROPERTY Equipment and Rolling Stock				TOTAL VALUATION Real and Personal Property	
				Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Rate per mile, actual value	Actual value	Equalized rate per mile	Equalized value	Actual value	Equalized value
Klickitat.....	Main Line	38.00											
	Main Track	.....	.730	$42,798 60	$31,243	$16,263 47	$11,872	$1,530 05	$1,117	$581 42	$425	$32,360	$12,297
	Sidings	.....	10.500	8,569 72	89,877	3,252 69	34,153	306 01	3,213	116 25	1,221	93,090	35,374
	Totals.....	.....	11.230	.....	$121,130	.....	$46,025	.....	$4,330	.....	$1,646	$125,450	$47,671

SCHEDULE "C"—Table V.—RECAPITULATION OF STEAM RAILROADS—VALUATION BY RAILROADS

	NAME OF ROAD	REAL PROPERTY Right-of-Way and Tracks		PERSONAL PROPERTY Equipment and Rolling Stock		TOTAL VALUATION Real and Personal Property	
		Actual value	Equalized value	Actual value	Equalized value	Actual value	Equalized value
1	Blakeley Railroad	$76,975	$31,560	$1,200	$492	$78,175	$32,052
2	Chicago, Milwaukee & St. Paul Railroad	40,405,302	16,470,729	6,235,496	2,555,548	46,640,788	19,026,287
3	Cowlitz, Chehalis & Cascade Railway	139,125	50,085	30,000	10,800	169,125	60,885
4	Great Northern Railway	62,474,025	25,207,056	8,014,630	3,242,941	70,489,255	28,449,997
5	Marysville & Arlington Railway	121,635	49,870	14,000	5,740	135,635	55,610
6	Newaukum Valley Railroad Company	81,497	29,339	10,800	3,888	92,297	33,227
7	Northern Pacific Railway	105,777,700	43,316,517	20,077,940	8,464,890	126,455,700	51,843,407
8	Oregon Trunk Railway	121,120	46,025	4,330	1,646	125,450	47,671
9	Oregon-Washington Railroad & Navigation Company	47,014,560	18,230,499	3,759,940	1,475,476	50,774,500	19,705,975
10	Pacific Coast Railroad	2,839,814	1,334,713	260,186	122,287	3,100,000	1,457,000
11	Peninsular Railway	166,490	68,261	129,300	53,013	295,790	121,274
12	Port Townsend & Puget Sound Railway Company	291,766	122,542	22,800	9,576	314,566	132,118
13	Puget Sound & Baker River Railway	150,000	52,501	15,000	5,249	165,000	57,750
14	Pullman Company (Equipment only)	.....	.....	577,410	235,666	577,410	235,666
15	Spokane & British Columbia Railway	139,620	58,640	12,700	5,334	152,320	63,974
16	Spokane International Railway	448,500	179,400	51,500	20,600	500,000	200,000
17	Spokane, Portland & Seattle Railway	35,751,361	13,928,790	1,596,470	621,988	37,347,831	14,550,778
18	Washington, Idaho & Montana Railway	84,706	31,341	26,000	9,620	110,706	40,961
19	Washington Western Railway	84,565	34,672	7,250	2,972	91,815	37,644
20	Waterville Railway	27,054	10,280	7,946	3,020	35,000	13,300
	Totals	$296,196,475	$119,314,830	$41,454,888	$16,850,746	$337,651,363	$136,165,576

200A. Comparative General Balance Sheet—Asset Side

For instructions covering this schedule, see the text pertaining to General Balance Sheet Accounts in the Uniform System of Account for Steam Railway Corporations. The entries in this balance sheet should be consistent with those in the supporting schedules on the page indicated. The entries in the short column (b_2) should be deducted from those in column (b_1) in order to obtain corresponding entries fo column (c). All credit entries hereunder should be in red ink. The making of entries in column (d) is optional.

Line No.	Balance at beginning of year (a)	Item (b)	(b_1) Total book assets at close of year	(b_2) Respondent's own issues included in (b_1)	Schedule No.	Balance at close of year (c)	Net change during year. (Increase in black, decrease in red.) (d)
1	.....	Investments					
2	$411,023,359.17	(701) Investment nn road and equipment (p. 203)	.....	.....	211	$426,559,037.33	$15,535,678.16
3	36,309.59	(702) Improvements on leased railway property (p. 203)	21,703.23	.....	211	21,703.23	*14,606.36
4	5,321.25	(703) Sinking funds (p. 210)	3,394.96	.....	214	3,394.96	*1,926.29
5	178,157.13	(704) Deposits in lieu of mortgaged property sold (p. 211)	188,000.02	.....	215	188,000.02	9,842.89
6	4,937,666.44	(705) Miscellaneous physical property (p. 207)			212	4,917,414.86	*20,251.58
7		(706) Investments in affiliated companies:					
8	191,199,548.87	(A) Stocks			...	186,611,682.21	*4,587,866.66
9	26,787,600.50	(B) Bonds			...	26,787,600.50	.....
10	2,992,404.73	(C) Notes			...	2,468,541.88	*523,862.85
11	10,364,544.73	(D) Advances (p. 218)			220	10,969,394.84	604,850.11
12		(707) Other investments:					
13	1,303,325.93	(A) Stocks			...	1,303,325.93	.....
14	5,695,550.39	(B) Bonds			...	6,425,805.39	730,255.00
15	187,504.00	(C) Notes			...	#194,503.00	#6,999.00
16	.....	(D) Advances (p. 218)			...	.....	.....
17	940,997.16	(E) Miscellaneous			...	#592,783.34	#348,692.22
18	655,652,289.89	Total investments				667,043,127.49	11,390,837.70
19		Current Assets					
20	9,847,035.25	(708) Cash			...	7,825,197.55	*2,021,837.70
21	.....	(709) Demand loans and deposits			...	1,050,000.00	1,050,000.00
			(b_1) Total book assets at close of year	(b_2) Respondent's own issues included in (b_1)			
22	.....	(710) Time drafts and deposits	.....	.....	...	.....	.....
23	.....	(711) Special deposits (p. 211)	.....	.....	216	14,000.00	14,000.00
24	14,841.53	(712) Loans and bills receivable (p. 218)	.....	.....	223	46,955.52	32,113.99
25	13,632.21	(713) Traffic and car-service balances receivable	.....	.....	...	1,513,161.70	1,499,529.49
26	.....	(714) Net balance receivable from agents and conductors	.....	.....	...	3,441,309.44	3,441,309.44
27	25,680,577.86	(715) Miscellaneous accounts receivable	.....	.....	...	29,056,042.97	3,375,465.11
28	.....	(716) Material and supplies	.....	.....	...	14,301,602.25	14,301,602.25
29	27,600.47	(717) Interest and dividends receivable	.....	.....	...	33,048.03	5,447.56
30	.....	(718) Rents receivable	.....	.....	...	.....	.....
31	11,720.00	(719) Other current assets	.....	.....	...	123,277.99	111,557.99
32	35,595,407.32	Total current assets				57,404,595.45	21,809,188.13
33		Deferred Assets					
			(b_1) Total book assets at close of year	(b_2) Respondent's own issues included in (b_1)			
34	.....	(720) Working fund advances	.....	.....	...	39,816.21	39,816.21
35	.....	(721) Insurance and other funds	.....	.....	236	5,000.00	5,000.00
36	64,330,623.90	(722) Other deferred assets	.....	.....	...	66,873,671.45	2,543,047.55
37	64,330,623.90	Total deferred assets				66,918,487.66	2,587,863.76
38		Unadjusted Debits					

8	191,199,548.87		(A) Stocks			...	186,611,682.21	*4,587,866.66
9	26,787,600.50		(B) Bonds			...	26,787,600.50	.....
10	2,992,404.73		(C) Notes			...	2,468,541.88	*523,862.85
11	10,364,544.73		(D) Advances (p. 218)			220	10,969,394.84	604,850.11
12		(707)	Other investments:					
13	1,303,325.93		(A) Stocks			...	1,303,325.93	.....
14	5,695,550.39		(B) Bonds			...	6,425,805.39	730,255.00
15	187,504.00		(C) Notes			...	#194,503.00	#6,999.00
16	.....		(D) Advances (p. 218)			...	.....	.....
17	940,997.16		(E) Miscellaneous			...	#592,783.34	#348,692.22
18	655,652,289.89		Total investments			...	667,043,127.49	11,390,837.70
19			Current Assets					
20	9,847,035.25	(708)	Cash			...	7,825,197.55	*2,021,837.70
21	.....	(709)	Demand loans and deposits			...	1,050,000.00	1,050,000.00
				(b_1) Total book assets at close of year	(b_2) Respondent's own issues included in (b_1)			
22	.....	(710)	Time drafts and deposits	.....	.....	...	.....	.....
23	.....	(711)	Special deposits (p. 211)	.....	.....	216	14,000.00	14,000.00
24	14,841.53	(712)	Loans and bills receivable (p. 218)	.....	.....	223	46,955.52	32,113.99
25	13,632.21	(713)	Traffic and car-service balances receivable	.....	.....	...	1,513,161.70	1,499,529.49
26	.....	(714)	Net balance receivable from agents and conductors	.....	.....	...	3,441,309.44	3,441,309.44
27	25,680,577.86	(715)	Miscellaneous accounts receivable	.....	.....	...	29,056,042.97	3,375,465.11
28	.....	(716)	Material and supplies	.....	.....	...	14,301,602.25	14,301,602.25
29	27,600.47	(717)	Interest and dividends receivable	.....	.....	...	33,048.03	5,447.56
30	.....	(718)	Rents receivable	.....	.....	...	.....	.....
31	11,720.00	(719)	Other current assets	.....	.....	...	123,277.99	111,557.99
32	35,595,407.32		Total current assets			...	57,404,595.45	21,809,188.13
33			Deferred Assets					
				(b_1) Total book assets at close of year	(b_2) Respondent's own issues included in (b_1)			
34	.....	(720)	Working fund advances	.....	.....	...	39,816.21	39,816.21
35	.....	(721)	Insurance and other funds	.....	.....	236	5,000.00	5,000.00
36	64,330,623.90	(722)	Other deferred assets	.....	.....	...	66,873,671.45	2,543,047.55
37	64,330,623.90		Total deferred assets			...	66,918,487.66	2,587,863.76
38			Unadjusted Debits					
39	50.82	(723)	Rents and insurance premiums paid in advance			...	112,451.96	112,401.14
40	.....	(724)	Discount on capital stock			...	.....	.....
41	177,777.84	(725)	Discount on funded debt			...	.....	*177,777.84
42	.....	(726)	Property abandoned chargeable to operating expenses			...	.....	.....
					Par values of holdings at close of year			
43	1,407,823.33	(727)	Other unadjusted debits (p. 218)		.....	228	21,040,435.76	19,632,612.43
44	.....	(728)	Securities issued or assumed—Unpledged		27,508,100.00	...	.....	.....
45	.....	(729)	Securities issued or assumed—Pledged		39,013,393.93	...	.....	.....
46	1,585,651.99		Total unadjusted debits			...	21,152,887.72	19,567,235.73
47	757,163,973.10		Grand Total			...	812,519,098.32	55,355,125.22

This Company's investment in N. P.-G. N., C. B. & Q. R. R. Collateral Joint Bonds is included in the amounts shown above in colum (a) and (c) for account No. 707 (b).

This Company's proportion ($107,612,500) of the N. P.-G. N., C. B. & Q. R. R. Collateral Joint Bonds is included in the amou shown above under account No. 755.

*Decrease.

#See letter 11/29/21 in front of report.

CHART

TOO

LARGE

FOR

FILMING

516. Rails Laid in Additional Tracks and in New Lines and Extensions—Concluded

Brought forward from page 505

Give particulars of rails applied in the construction of new tracks during the year, following the instructions of the preceeding schedule so far as applicable. In column (a) designate by an arbitrary mark the division or extension on which the rails were applied, and in a footnote name and define the division or extension.

Line No.	Division or extension (a)	Kind of rail (b)	Miles of new track: Main tracks (c)	Miles of new track: Yard tracks and sidings (d)	Weight of rail applied: Pounds per yard of rail: In main tracks (e)	Weight of rail applied: Pounds per yard of rail: In yard tracks and sidings (f)	Total number of tons of 2,240 pounds (g)	Average cost per ton of 2,240 pounds (h)	Total charges on account of rail laid (i)	Distribution of charges: Additions and betterments (j)	Distribution of charges: New lines and extensions (k)
55			4.320	21.887			3012.5156		75,958.28	75,958.28	
56	K	4	1.531		90		210.3580	24.35	5,122.48	5,122.48	
57		4		.059		90	8.1177	24.25	196.85	196.85	
58		4		.037		80	4.5523	26.78	121.92	121.92	
59		4		.752		77½	89.0118	24.25	2,158.24	2,158.24	
60		4		.001		75	.1104	24.28	2.68	2.68	
61		4		.580		68	60.2589	26.35	1,588.11	1,588.11	
62		4		.034		60	3.0714	18.38	56.45	56.45	
63	L	4		.018		90	2.4509	24.25	59.43	59.43	
64		4		1.014		80	123.8571	25.18	3,118.29	3,118.29	
65		4		.042		77½	4.9590	24.62	122.07	122.07	
66		4		.021		75	2.4330	24.64	59.94	59.94	
67	M	4		.020		80	2.3929	24.75	59.22	59.22	
68		4		.086		60	7.9018	24.75	195.57	195.57	
69	N	4		.063		90	8.6250	25.58	220.60	220.60	
70		4		.014		77½	1.6380	24.25	39.72	39.72	
71		4		.146		75	16.7410	24.25	405.97	405.97	
72		4		.264		60	24.1516	25.27	610.30	610.30	
73		4		.142		80	17.3869	30.32	527.16	527.16	
74	O	4		.106		90	14.5848	25.53	372.42	372.42	
75		4		.192		80	23.4285	25.26	591.75	591.75	
76		4		.565		77½	66.8087	25.28	1,688.65	1,688.65	
77		4		.003		72	.3214	24.24	7.79	7.79	
78		4	.010		70		1.0728	24.25	26.02	26.02	
79		4		.171		68	17.7588	26.19	465.13	465.13	
80	P	4		9.946		90	1366.6893	24.34	33,270.69	33,270.69	
81		4		.509		85	66.0835	26.80	1,770.84	1,770.84	
82		4		2.845		80	347.4641	24.91	8,654.31	8,654.31	
83		4		3.707		77½	438.6829	24.89	10,919.41	10,919.41	
84		4		.029		75	3.3148	26.08	86.44	86.44	
85		4		2.466		68	256.0218	26.54	6,794.53	6,794.53	
86		4		.628		60	57.5252	27.32	1,571.69	1,571.69	
87		4		.092		56	7.9083	25.03	197.92	197.92	
88	Q	4		.019		85	2.5045	24.45	61.23	61.23	
89		4		.255		68	26.4258	24.84	656.47	656.47	
90		4		.339		60	31.0499	24.85	771.68	771.68	
91		4		.009		56	.7500	25.84	19.38	19.38	
92	R	4		.246		90	33.8216	25.00	845.52	845.52	
93		4		.222		85	28.7836	24.72	711.64	711.64	
94		4		.109		80	13.3539	24.68	1,329.57	329.57	
95		4		.465		77½	55.0778	24.68	359.11	1,359.11	
96		4		.165		75	18.9175	24.99	472.70	472.70	
97		2		.027		70	2.9060	43.06	125.14	125.14	
98		4		.020		70	2.1354	25.40	54.24	54.24	
99		4		.461		68	47.9001	24.47	1,172.01	1,172.01	
100		4		.429		60	39.3397	24.63	968.96	968.96	
101		4		.123		56	10.5166	24.25	255.03	255.03	
Credits made to property account for tracks removed.									25,074.80 Cr.	25,074.80 Cr.	
	Total		5.861	49.328			6581.6806		139,768.75	139,768.75	

NOTE: Divisions designated by letters in column "a" are listed on page 505-B.

531-A. Statistics of Rail-Line Operations—Entire Line—Concluded

[For Companies Making Operating Reports]

Average per Mile of Road—Continued

Item No.	Item (a)	Amount (b)
118	Freight service car-miles	
119	Passenger service car-miles	
120	Freight revenue †	

Averages per Locomotive-Mile:

Item No.	Item (c)	Amount (d)
151	Train-miles—freight trains †	
152	Car-miles—freight trains †	
153	Train-miles—passenger trains †	
154	Car-miles—passenger trains †	
155	Train-miles—mixed trains †	
156	Car-miles—mixed trains †	
157	Train-miles—special trains †	
158	Car-miles—special trains †	

97	2		.027	70	2.9060	43.06	125.14	125.14
98	4		.020	70	2.1354	25.40	54.24	54.24
99	4		.461	68	47.9001	24.47	1,172.01	1,172.01
100	4		.429	60	39.3397	24.63	968.96	968.96
101	4		.123	56	10.5166	24.25	255.03	255.03
Credits made to property account for tracks removed.							25,074.80 Cr.	25,074.80 Cr.
	Total	5.861	49.328		6581.6806		139,768.75	139,768.75

NOTE: Divisions designated by letters in column "a" are listed on page 505-B.

531-A. Statistics of Rail-Line Operations—Entire Line—Concluded

[For Companies Making Operating Reports]

Average per Mile of Road—Continued

Item No.	Item (a)	Amount (b)
118	Freight service car-miles	
119	Passenger service car-miles	
120	Freight revenue †	
121	Passenger service train revenue †	
122	Operating revenues †	
123	" expenses †	
124	Net operating revenues †	
125	Ton-miles—revenue freight	
126	" —all freight	
127	Passenger-mile—revenue	

Averages per Train-mile:

131	Loaded freight car-miles—freight trains †	
132	" " " " —Mixed " †	
133	Empty " " " —freight " †	
134	" " " " —mixed " †	
135	Ton-miles—revenue freight †	
136	" —all freight †	
137	Passenger train car-miles—passenger trains †	
138	" " " " —mixed trains †	
139	Revenue passenger-miles †	
140	Freight revenue †	
141	Passenger service train revenue †	
142	Operating revenues †	
143	" expenses †	
144	Net operating revenues †	

Averages per Locomotive-Mile:

Item No.	Item (c)	Amount (d)
151	Train-miles—freight trains †	
152	Car-miles—freight trains †	
153	Train-miles—passenger trains †	
154	Car-miles—passenger trains †	
155	Train-miles—mixed trains †	
156	Car-miles—mixed trains †	
157	Train-miles—special trains †	
158	Car-miles—special trains †	

Averages per Loaded Freight Car-mile:

161	Ton-miles—revenue freight †	
162	" —all freight †	
163	Freight revenue ‡	

Averages per Car-mile—Passenger:

171	Passenger-miles—revenue †	
172	Passenger revenue ‡	

Miscellaneous Averages:

181	Miles hauled—revenue freight †	
182	" " —nonrevenue freight †	
183	" " —all freight †	
184	Miles carried—revenue passengers †	
185	Revenue per ton of freight ‡	
186	" " ton-mile of freight ‡	
187	" " passenger ‡	
188	" " passenger-mile ‡	
189	Operating ratio †	

532. Switching and Terminal Traffic and Car Statistics

[For Switching and Terminal Companies only]

Give particulars of cars handled during the year. With respect to the term "cars handled" it should be observed that, when applied to switching operations, the movement of a car from the point at which a switching company receives it, whether loaded or empty, to the point where it is loaded or unloaded, is to be counted as one car handled. The return of a car, whether loaded or empty, from the point where it is loaded or unloaded, to the point of delivery is to be counted as one car handled. No incidental movement is to be considered, unless such incidental movement involves the receipt of additional revenue. When applied to terminal operations, such as union station, bridge, ferry, or other joint facility terminal operations, the term "cars handled" includes all cars for which facilities are furnished.

Freight Traffic:

Item No.	Item (a)	Switching operations (b)	Terminal operations (c)	Total (d)
201	Number of cars handled earning revenue—Loaded			
202	Number of car handled earning revenue—Empty			
203	Number of cars handled at cost for tenant companies—Loaded			
204	Number of cars handled at cost for tenant companies—Empty			
205	Number of cars handled not earning revenue—Loaded			
206	Number of cars handled not earning revenue—Empty			
207	Total number of cars handled			

Passenger Traffic:

208	Number of cars handled earning revenue—Loaded			
209	Number of cars handled earning revenue—Empty			
210	Number of cars handled at cost for tenant companies—Loaded			
211	Number of cars handled at cost for tenant companies—Empty			
212	Number of cars handled not earning revenue—Loaded			
213	Number of cars handled not earning revenue—Empty			
214	Total number of cars handled			
215	Total number of cars handled in revenue service (items 207 and 214)			
216	Total number of cars handled in work service			

[For Companies Making Operating Reports]

Report for the Year Ended December 31, 1920

Give the various statistical items called for concerning the rail-line operations of respondent's road during the year regardless of changes in form of control. If the respondent for its own purposes uses more accurate methods than are provided below for computing the required averages, the more accurate figures should be given in the returns, and the method of computing each average should be indicated in a footnote. Train-miles, locomotive-miles, car-miles, motor car-miles, and other particulars are to be classified in accordance with the Uniform System of Accounts for Steam Railway Corporations. Particulars of electric operations not provided for in the form given below should be stated in a memorandum at the foot of the next page.

Instructions Regarding Various Items

The items are designated hereunder by the numbers attached to them in the table.

1 includes road operated under trackage rights.

81 includes all freight the revenue from which is includible in account No. 101, "Freight."

82 includes only that nonrevenue freight which is hauled on transportation trains.

85 relates to the freight included in 82.

103 is the aggregate of revenue accounts Nos. 102 to 100, inclusive. (See page 303.)

111 = 13 ÷ 1.
112 = 14 ÷ 1.
113 = 15 ÷ 1.
114 = 16 ÷ 1.
115 = 17 ÷ 1.
116 = 18 ÷ 1.
117 = 41 ÷ 1.
118 = (55 + 61 + 62 + 63 + 69 + 70 + 71) ÷ 1.
119 = (60 + 64 + 65 + 66 + 67 + 72 + 73 + 74 + 75) ÷ 1.
120 = 101 ÷ 1.
121 = 103 ÷ 1.
122 = 104 ÷ 1.
123 = 105 ÷ 1.
124 = 106 ÷ 1.
125 = 84 ÷ 1.
126 = 86 ÷ 1.
127 = 92 ÷ 1.
131 = 51 ÷ 13.
132 = 61 ÷ 15.
133 = 52 ÷ 13.
134 = 62 ÷ 15.
135 = 84 ÷ (13 + 15).
136 = 86 ÷ (13 + 15).
137 = 60 ÷ 14.
138 = (64 + 65 + 66 + 67) ÷ 15.
139 = 92 ÷ (14 + 15).
140 = 101 ÷ (13 + 15).
141 = 103 ÷ (14 + 15).
142 = 104 ÷ 17.
143 = 105 ÷ 17.
144 = 106 ÷ 17.
151 = 13 ÷ 24.
152 = 55 ÷ 24.
153 = 14 ÷ 28.
154 = 60 ÷ 28.
155 = 15 ÷ 32.
156 = 68 ÷ 32.
157 = 16 ÷ 36.
158 = 76 ÷ 36.
161 = 84 ÷ (51 + 61).
162 = 86 ÷ (51 + 61).
163 = 101 ÷ (51 + 61).
171 = 92 ÷ (56 + 57 + 64 + 65).
172 = 102 ÷ (56 + 57 + 64 + 65).
181 = 84 ÷ 81.
182 = 85 ÷ 82.
183 = 86 ÷ 83.
184 = 92 ÷ 91.
185 = 101 ÷ 81.
186 = 101 ÷ 84.
187 = 102 ÷ 91.
188 = 102 ÷ 92.
189 = 105 ÷ 104.

Item No.	Item (a)	Includes Oregon Amount (b)
1.	Average mileage of road operated† (miles) Oregon	9.89
	Wash.	1,199.65
	Total	1,209.54
	Train-Miles	
11.	Freight—ordinary	1,392,261
12.	" —light	26,112
13.	" —total	1,418,373
14.	Passenger	2,067,666
15.	Mixed	84,795
16.	Special	1,755
17.	Total transportation service	3,572,589
18.	Work service	317,341
	Locomotive-Miles	
21.	Freight—principal	1,418,373
22.	" —helper	196,925
23.	" —light	189,483
24.	" —total	1,804,781
25.	Passenger—principal	2,067,666
26.	" —helper	96,936
27.	" —light	140,202
28.	" —total	2,304,804
29.	Mixed train—principal	84,795
30.	" " —helper	37
31.	" " —light	532
32.	" " —total	85,364
33.	Special—principal	1,755*
34.	" —helper	133
35.	" —light	329

Item No.	Item (c)	Includes Oregon Amount (d)
58.	Passenger train—dining	1,039,567
59.	" " —other	5,050,829
60.	" " —total	13,919,397
61.	Mixed train—freight—loaded	205,621
62.	" " — " —empty	101,613
63.	" " —caboose	385
64.	" " —passenger	104,188
65.	" " —sleeping, parlor, and observation	5,761
66.	" " —dining	.....
67.	" " —other passenger train	53,283
68.	" " —total	470,851
69.	Special train—freight—loaded	27,095
70.	" " — " —empty	.....
71.	" " —caboose	1,464
72.	" " —passenger	12,275
73.	" " —sleeping, parlor, and observation	.....
74.	" " —dining	.....
75.	" " —other passenger train	848
76.	" " —total	41,682
77.	Total transportation service	66,428,411
78.	Work service	1,051,222
	Freight Service	
81.	Tons—revenue freight	5,110,468
82.	" —nonrevenue freight	*826,878
83.	" —total	*5,937,346
84.	Ton-miles—revenue freight	819,418,933
85.	" " —nonrevenue freight	110,655,379
86.	" " —total	930,074,312
	Passenger Service	

Train-Miles

11.	Freight—ordinary	1,392,261
12.	" —light	26,112
13.	" —total	1,418,373
14.	Passenger	2,067,666
15.	Mixed	84,795
16.	Special	1,755
17.	Total transportation service	3,572,589
18.	Work service	317,341

Locomotive-Miles

21.	Freight—principal	1,418,373
22.	" —helper	196,925
23.	" —light	189,483
24.	" —total	1,804,781
25.	Passenger—principal	2,067,666
26.	" —helper	96,936
27.	" —light	140,202
28.	" —total	2,304,804
29.	Mixed train—principal	84,795
30.	" " —helper	37
31.	" " —light	532
32.	" " —total	85,364
33.	Special—principal	1,755*
34.	" —helper	133
35.	" —light	329
36.	" —total	2,217*
37.	Train switching	264,678
38.	Yard switching—freight	839,651
39.	" " —passenger	57,878
40.	" " —total	897,529*
41.	Total transportation service	5,359,373*
42.	Work service	319,486
46.		
47.		
48.		
49.		
50.		

Car-Miles

51.	Freight train—loaded	35,211,192
52.	" " —empty	15,331,793
53.	Sum of loaded and empty	50,542,985
54.	Freight train—caboose	1,453,496
55.	" " —total	51,996,481
56.	Passenger train—passenger	4,335,525
57.	" " —sleeping, parlor, and observation	3,493,476
61.	Mixed train—freight—loaded	205,621
62.	" " — " —empty	101,613
63.	" " —caboose	385
64.	" " —passenger	104,188
65.	" " —sleeping, parlor, and observation	5,761
66.	" " —dining	.....
67.	" " —other passenger train	53,283
68.	" " —total	470,851
69.	Special train—freight—loaded	27,095
70.	" " — " —empty	.....
71.	" " —caboose	1,464
72.	" " —passenger	12,275
73.	" " —sleeping, parlor, and observation	.....
74.	" " —dining	.....
75.	" " —other passenger train	848
76.	" " —total	41,682
77.	Total transportation service	66,428,411
78.	Work service	1,051,222

Freight Service

81.	Tons—revenue freight	5,110,468
82.	" —nonrevenue freight	*826,878
83.	" —total	*5,937,346
84.	Ton-miles—revenue freight	819,418,933
85.	" " —nonrevenue freight	110,655,379
86.	" " —total	930,074,312

Passenger Service

91.	Passengers carried—revenue	2,244,544
92.	Passenger-miles—revenue	168,517,936

Revenues and Expenses

101.	Freight revenue†	10,189,002.20
102.	Passenger revenue†	5,229,198.38
103.	Passenger service train revenue†	7,173,892.63
104.	Operating revenues†	18,508,427.82
105.	" expenses†	19,671,228.39
106.	Net operating revenues†	*1,162,800.57

Averages per Mile of Road

111.	Freight-train miles	1,173
112.	Passenger-train miles	1,709
113.	Mixed-train miles	70
114.	Special-train miles	1
115.	Transportation service train-miles	2,954
116.	Work-train miles	262
117.	Locomotive-miles—transportation	4,431

†Two decimal places required.
*See attached sheet.

that basis does not truthfully reflect the amount earned in the State of Washington.

NOTE 2.—The operations of the company within the State of Oregon have been included with those in Washington in the figures shown on page 303A. The authority for so doing is a letter dated December 16th, 1910 to "Mr. F. V. Brown, Attorney for the Great Northern Ry. Co. at Seattle, Wash." and signed by the "Railroad Commission of Washington by J. C. Lawrence, member of the commission."

The Great Northern Railway Co. owns no physical property in the State of Oregon and the mileage operated in that state is very small, being but 9.89 miles, all trackage over the lines of other companies The Great Northern Ry. Co. does almost no local business in Oregon, the entire traffic within that State being inter-state and the Oregon proportion of the revenue from such interstate traffic would be small. On the other hand the expenses in the State of Oregon are large on account of the terminals in Portland. In order that the expenses might be charged against the revenue from interstate traffic earned by such disbursements, application was made to the Railroad Commission of the State of Washington, for permission to include the operations in Oregon with those in Washington, which request was acted upon and granted as indicated above.

(Here follows Reports for the Year Ended December 31, 1920, marked side folio page 450.)

[fol. 451] Great Northern Railway Company

Statement Showing Tons of Revenue and Non-revenue Freight, for the Year Ended December 31, 1920

State of Washington (Including Oregon)

Schedule 531-B

Freight Service

81	Tons	Revenue freight	5,110,468
82	"	Non-revenue freight	826,878
83	"	Total	5,937,346

(Here follows statement marked side folio pages 452-456.)

[fol. 457] O. W. R. & N. Exhibit No. 1

Oregon-Washington Railroad & Navigation Company

Statement of Total Freight Operations for the State of Washington for the Year Ended December 31, 1920

Maintenance of Way and Structures	1,748,322.37
Maintenance of Equipment	1,210,210.99
Traffic	75,431.02
Transportation—Rail Line	3,489,066.74
Transportation—Water Line	27,535.02
Miscellaneous Operations	.....
General	432,945.79
Transportation for Investment—Cr.	.....
Total	6,983,511.93

Auditor's Office, Portland, Oregon, April 9, 1921.

[fol. 458] O. W. R. & N. Exhibit No. 2

Oregon-Washington Railroad & Navigation Company

Statement of Freight Operation for the Following Selected Accounts for the State of Washington for Year Ended December 31, 1920

Freight Operations:	
Train enginemen	282,945.55
Fuel for train locomotives	616,080.25
Water for train locomotives	20,025.22
Lubricant for train locomotives	7,290.70
Other supplies for train locomotives	8,672.29
Total	935,014.01
Train Service:	
Trainmen	445,166.80
Train supplies and expenses	82,870.47
Total	528,037.27
Superintendence:	
Dispatching trains	32,320.75
Telegraph and telephone operation	26,162.71
Signal and interlocking operation	32,899.51
Crossing protection	8,583.44
Drawbridge operation	19,137.23
Total	119,103.64

Maintenance of Equipment:

Repairs to steam locomotives	481,487.25
Repairs to cars	409,443.32
Shop machinery	18,074.00
Superintendence	65,220.30
Injuries to persons	5,719.26
Total	979,944.13

Auditor's Office, Portland, Oregon, April 9, 1921.

[fol. 459] O. W. R. & N. EXHIBIT No. 3

Oregon-Washington Railroad & Navigation Company

Statement of Operating Expenses for the State of Washington for Year Ended December 31, 1920

Entire Operating Expenses covered by Maintenance of Way and Structures	$3,050,079.10
All Operating Expenses under the general heading of "Maintenance of Way and Structures" with the exception of the single item of "Maintaining Joint Tracks, Yards and Other Facilities, Debits and Credits"	2,731,426.10

Auditor's Office, Portland, Oregon, April 9, 1921.

[fol. 460]

O. W. R. & N. Exhibit No. 4

Oregon-Washington Railroad & Navigation Company

Statement of Mileage of Freight Train Performance in the State of Washington for Year 1920

	Main line 1	Branches 2	Total 3	*Gray's Harbor branch 4	*Tons branch 5
Freight Train Miles	548,156	582,653	1,130,809	89,261	4,344
Freight Train Engine Miles	581,028	606,397	1,187,425	90,110	6,350
Freight Gross Ton-Miles	800,487,517	310,756,128	1,111,243,645	60,226,569	3,131,641
Freight Net Ton-Miles	399,958,860	139,699,914	539,658,834	17,398,483	27,253

*Included in Column 2.

Auditor's Office, Portland, Oregon, April 9, 1921.

---

*Included in Column 2.

[fol. 463]

O. W. R. & N. Exhibit No. 6

Statement Showing Distances, Rates and Revenues on Logs, Carloads, from and to Points from and to Which There Was a Regular Movement
Iron from Seattle, Wash., and on Cement from Concrete, Wash., t

Logs—Rates in cents per 100 pounds and Revenue per ca

From—	To—	Distance (miles)	Rates per 1,000 feet	(1) Rates in cents per 100 lbs.	(2) Revenue per car
Arctic, Wash.....	Preacher's Slough, Wash....	9.4	1.69	1.9	$15.20
Arctic, "	Aberdeen, "	10.0	1.56½	1.7	13.60
Hanna, "	Preacher's Slough, "	9.1	1.56½	1.7	13.60
Fuller, "	Preacher's Slough, "	10.9	1.56½	1.7	13.60
Midson, "	Cosmopolis, "	11.6	1.95½	2.2	17.60
Vader, "	Napavine, "	12.7	2.34½	2.6	20.80
Primo, "	Cosmopolis, "	13.0	1.95½	2.2	17.60
Midson, "	So. Aberdeen, "	13.5	1.95½	2.2	17.60
Midson, "	Preacher's Slough, "	13.7	1.95½	2.2	17.60
Winlock, "	Chehalis, "	13.7	2.11½	2.4	19.20
Midson, "	Aberdeen, "	14.3	1.95½	2.2	17.60
Primo, "	Preacher's Slough, "	15.1	1.95½	2.2	17.60
Aberdeen, "	Primo, "	15.7	1.95½	2.2	17.60
Primo, "	Aberdeen, "	15.7	1.95½	2.2	17.60
Saginaw, "	Preacher's Slough, "	16.0	1.56½	1.7	13.60
Chehalis, "	Helsing Jct., "	16.0	2.19	2.4	19.20
Fuller, "	Aberdeen, "	17.9	1.95½	2.2	17.60
Napavine, "	Bucoda, "	18.4	2.34½	2.6	20.80
Fuller, "	Hoquiam, "	21.0	1.95½	2.2	17.60
Aberdeen, "	Saginaw, "	23.0	2.34½	2.6	20.80
Arctic, "	Saginaw, "	25.4	2.25	2.5	20.00
Tono, "	Winlock, "	25.4	2.25	2.5	20.00
Balch, "	Preacher's Slough, "	28.5	1.95½	2.2	17.60
Chehalis, "	Olympia, "	30.2	2.42½	2.7	21.60
Primo, "	Saginaw, "	31.1	2.34½	2.6	20.80
Independence, "	Preacher's Slough, "	33.1	1.95½	2.2	17.60
Arctic, "	Callow, "	33.3	2.62½	2.9	23.20
Vader, "	Helsing Jct., "	36.1	2.50	2.8	22.40
Primo, "	Callow, "	39.0	2.62½	2.9	23.20
Chehalis, "	Aberdeen, "	57.7	2.65½	2.9	23.20

From Seattle, Wash., to—	Miles	(a) S g Rate (2)
Black River Jct., Wash.....	9.4	3
" "	9.4	3
" "	9.4	3
Orillia, "	11.9	3
" "	11.9	3
" "	11.9	3
O'Briens, "	13.9	3
" "	13.9	3
" "	13.9	3
" "	13.9	3
" "	13.9	3
" "	13.9	3
Kent, "	16.2	3
" "	16.2	3
" "	16.2	3
" "	16.2	3
Thomas, "	17.9	3
" "	17.9	3
Christopher, "	19.4	3
Auburn, "	21.3	4
" "	21.3	4
" "	21.3	4
Sumner, "	28.4	4
No. Puyallup, "	30.2	4
Hugh's Spur, "	31.7	4⅓
" "	31.7	4⅓
" "	31.7	4½
Tidewater, "	36.6	4½
Tacoma "	38.1	4½
Pioneer, "	57.8	5⅓

(1) Based on weight of 9,000 lbs. per 1,000 feet.
(2) Basd on weight of 80,000 lbs.

(a) North Pacific Coast Fr
(b) North Pacific Coast Fr
(c) Great Northern Railwa

O. W. R. & N. Exhibit No. 6

oints from and to Which There Was a Regular Movement During Years 1919 and 1920 Compared With Rates and Revenue on Sand and Gravel, Brick and Scrap om Seattle, Wash., and on Cement from Concrete, Wash., to Equidistant Points

Logs—Rates in cents per 100 pounds and Revenue per car

(1) s in per bs.	(2) Reve-nue per car	From Seattle, Wash., to—	Miles	(a) Sand and gravel Rate	(a) Sand and gravel (2) Revenue per car	(b) Brick (common) Rate	(b) Brick (common) (2) Revenue per car	(b) Scrap iron Rate	(b) Scrap iron (2) Revenue per car	From Concrete, Wash., to—	Miles	(b) (c) Cement Rate	(b) (c) Cement (2) Revenue per car
9	$15.20	Black River Jct., Wash.....	9.4	3	$24.00	6½	$52.00	6½	$52.00	Hamilton, Wash.....	11.5	8	$64.00
7	13.60	" "	9.4	3	24.00	6½	52.00	6½	52.00	" "	11.5	8	64.00
7	13.60	" "	9.4	3	24.00	6½	52.00	6½	52.00	" "	11.5	8	64.00
7	13.60	Orillia, "	11.9	3	24.00	6½	52.00	6½	52.00	" "	11.5	8	64.00
2	17.60	" "	11.9	3	24.00	6½	52.00	6½	52.00	" "	11.5	8	64.00
6	20.80	" "	11.9	3	24.00	6½	52.00	6½	52.00	" "	11.5	8	64.00
2	17.60	O'Briens, "	13.9	3	24.00	6½	52.00	6½	52.00	Hop Ranche, "	14.1	8	64.00
2	17.60	" "	13.9	3	24.00	6½	52.00	6½	52.00	" "	14.1	8	64.00
2	17.60	" "	13.9	3	24.00	6½	52.00	6½	52.00	" "	14.1	8	64.00
4	19.20	" "	13.9	3	24.00	6½	52.00	6½	52.00	" "	14.1	8	64.00
2	17.60	" "	13.9	3	24.00	6½	52.00	6½	52.00	Lyman, "	14.8	8	64.00
2	17.60	" "	13.9	3	24.00	6½	52.00	6½	52.00	" "	14.8	8	64.00
2	17.60	Kent, "	16.2	3	24.00	6½	52.00	6½	52.00	" "	14.8	8	64.00
2	17.60	" "	16.2	3	24.00	6½	52.00	6½	52.00	" "	14.8	8	64.00
7	13.60	" "	16.2	3	24.00	6½	52.00	6½	52.00	Winkler's, "	17.0	8	64.00
4	19.20	" "	16.2	3	24.00	6½	52.00	6½	52.00	" "	17.0	8	64.00
2	17.60	Thomas, "	17.9	3	24.00	6½	52.00	6½	52.00	" "	17.0	8	64.00
6	20.80	" "	17.9	3	24.00	6½	52.00	6½	52.00	Duncans, "	18.5	8	64.00
2	17.60	Christopher, "	19.4	3	24.00	6½	52.00	6½	52.00	" "	18.5	8	64.00
6	20.80	Auburn, "	21.3	4	32.00	6½	52.00	8	64.00	Sedro-Woolley "	23.3	9	72.00
5	20.00	" "	21.3	4	32.00	6½	52.00	8	64.00	Sterling, Wash.....	25.6	9	72.00
5	20.00	" "	21.3	4	32.00	6½	52.00	8	64.00	" "	25.6	9	72.00
2	17.60	Sumner, "	28.4	4	32.00	6½	52.00	8	64.00	Burlington, "	28.0	9	72.00
7	21.60	No. Puyallup, "	30.2	4	32.00	6½	52.00	8	64.00	Mt. Vernon, "	31.9	9	72.00
6	20.80	Hugh's Spur, "	31.7	4½	36.00	6½	52.00	8	64.00	" "	31.9	9	72.00
2	17.60	" "	31.7	4½	36.00	6½	52.00	8	64.00	" "	31.9	9	72.00
9	23.20	" "	31.7	4½	36.00	6½	52.00	8	64.00	" "	31.9	9	72.00
8	22.40	Tidewater, "	36.6	4½	36.00	6½	52.00	8	64.00	Fir, "	37.3	9	72.00
9	23.20	Tacoma "	38.1	4½	36.00	6½	52.00	8	64.00	Hanleys Spur, "	39.2	9	72.00
9	23.20	Pioneer, "	57.8	5½	44.00	9½	76.00	14½	116.00	Kruse, "	58.0	9	72.00

(a) North Pacific Coast Freight Bureau Tariff No. 25-A, W. P. S. C. No. 32.
(b) North Pacific Coast Freight Bureau Tariff No. 1, W. P. S. C. No. 1.
(c) Great Northern Railway Tariff No. 1512-A, I. C. C. No. A-4934.

[fol. 461] O. W. R. & N. Exhibit 24-A

Oregon-Washington Railroad & Navigation Company

Statement of Freight Train Car Mileage Made in the State of Washington During the Year 1920

	Main line	Branches	Total	*Gray's Harbor, Tone, American Lake, and Olympia branches
	1	2	3	4
Loaded car miles.....	14,447,951	4,934,558	19,382,509	986,586
Empty car miles (excluding caboose).....	4,932,423	2,560,046	7,492,469	727,790

*Included in Column 2.

Auditor's Office, Portland, Oregon, April 9, 1921.

[fol. 462] O. W. R. & N. Exhibit No. 5

Oregon-Washington Railroad & Navigation Company

Statement of Cost of Freight Train Cars Repairs for Year 1920

Total Charge Account 314 "Freight Train Cars—Repairs" $1,426,387.05

Estimated:

Charges accruing to Logging Equipment $53,251.88

Charges accruing to all other Freight Train Cars $1,373,135.17

Auditor's Office, Portland, Oregon, April 9, 1921.

(Here follows O. W. R. & N. Exhibit No. 6, marked side folio page 463.)

[fol. 464]

O. W. R. & N. Exhibit #7

Statement Showing Gross, Tare, and Net Weights, also Number of Feet and Average Weight per 1,000 Ft. of 10 Cars of Logs Weighed at Centralia, Washington (Loaded and Empty), Between January 21 and January 28, 1921.

Car number	Gross wgt.	Tare wgt.	Net wgt.	Number feet	Average weight per 1,000 feet
U. P. 53920	110,360	30,600	79,760	6,756	11,805
U. P. 50402	106,980	30,500	76,480	7,926	9,649
U. P. 50523	108,740	35,700	73,040	7,759	9,414
U. P. 53913	95,360	31,300	64,060	6,274	10,210
U. P. 50543	106,000	34,000	72,000	7,154	10,064
U. P. 54444	110,520	36,900	73,620	7,968	9,239
U. P. 53952	98,560	31,800	66,760	7,397	9,025
U. P. 53945	100,000	30,200	69,800	7,832	8,912
U. P. 50095	97,200	33,400	63,800	7,190	8,873
U. P. 50001	102,000	33,700	68,300	7,406	9,222
Total	1,035,720	328,100	707,620	73,662	96,063
Average per car	103,572	32,810	70,762	7,366	9,606

[fol. 465] O. W. R. & N. Exhibit #8

Oregon-Washington Railroad & Navigation Company

Statement Showing Valuation and Taxes Used as a Basis for Figuring Return on Log Traffic, North River Line and Grays Harbor Branch, State of Washington, Year Ended December 31, 1920

Valuation

1. Valuation of Grays Harbor Branch....			$2,924,543
2. Amount assigned to freight based on Freight proportion of Operating Expenses (68%)			$1,988,689
3. Valuation of North River Line—(100% Freight)			743,283
			2,731,972
4. Gross Ton Miles All Freight North River Line and Grays Harbor Branch		60,226,569 =	100%
5. Gross Ton Miles—Logs hauled North River Line and Grays Harbor Branch		13,968,236 =	23.19%
6. Proportion of valuation assignable to Logging Traffic, 23.19% of.....	$2,731,972	$633,544	
7. Interest 6% on Investment.	633,544	.....	$38,013
8. Valuation of Rolling Stock Equipment assigned to Logging Traffic—North River Line and Grays Harbor Branch.....	.....	$515,200	
9. Interest 6% on Investment.	$515,200	.....	$30,912
10. Total Interest 6% on Valuation Road and Equipment			68,925

Taxes

11. All Taxes (excepting on equipment) Grays Harbor Branch	35,037
12. Amount assessed to freight based on freight proportion of Operating Expenses (68%).....	$23,826
13. All Taxes (excepting on equipment) North River Line (100% freight)	6,276
	$30,102
14. Proportion of taxes assignable to Logging Traffic 23.19% of $30,102 (see items 4, 5 & 6).....	$6,981
15. Taxes on value of equipment assigned to logging Traffic North River Line and Grays Harbor Branch based on valuation 515,200 per item #8	1,317
16. Total taxes	$8,298

Auditor's Office, Portland, Oregon, October 21, 1921.

[fol. 466] O. W. R. & N. Exhibit #9

Oregon-Washington Railroad & Navigation Company

Data Regarding Amortization of Line North River Junction to Vesta Creek, State of Washington

Construction Cost of Line North River Junction to Vesta Creek		$950,751
Proceeds to be recovered from Track Metal	$37,205	
" " " " from Right of Way	1,000	
Less—Total Proceeds recovered		38,205
Total Amount remaining unextinguished		$912,546
Contemplated Use of line 15 years—1/15 of $912,546 per year		$60,836

Auditor's Office, Portland, Oregon, October 21, 1921.

(Here follow Comparative General Balance Sheet, marked side folio pages 467-486; Income Account for the Year, marked side folio page 487; Report for the Year Ended December 31, 1920, marked side folio pages 488-516.)

[fols. 517–543] Willapa Traffic Assn. Exhibit No. E

Before the Department of Public Works of Washington

Cause No. 5159

Involving Rates on Saw Logs Car Loads Between Stations in the State of Washington

Statement of Lumber and Shingle Productions and Distribution for the State of Washington During the Year of 1920, as Taken from May Issue of the Timberman Which was Compiled from the Annual Report of the United States Forest Service

Lumber

Production

Fir, Pine, Larch, Spruce, Cedar, Hemlock and Cotton Wood	5,523,195,000	
Stocks on Hand	1,162,001,000	
		6,685,196,000 Ft.

Distribution

Shipped by Rail	2,069,713,000	
Shipped by Water	846,397,000	
Retail	385,571,000	
Not specified	1,417,501,000	
In Stock	1,966,014,000	
		6,685,196,000 "

CHART

TOO

LARGE

FOR

FILMING

CHART

TOO

LARGE

FOR

FILMING

300P. Profit and Loss Account

Show hereunder the items of the Profit and Loss Account of the respondent for the year, classified in accordance with the Uniform System of Accounts for Steam Railway Corporations. The sum of the dividends stated in this account and those stated in the Income Account (p. 301) for any particular class of stock should equal the total amount of dividends declared on such class during the year as shown in schedule No. 300D, columns (e) and (f).

Line No.	Item (a)	Debits (b)	Credits (c)	Remarks (d)
1.	*Credit balance at beginning of year (p. 201)	.....	2,845,830.86	
2.	Credit balance transferred from Income (p. 301)	.....	.....	
3.	(603) Profit on road and equipment sold (p. 323)	.....	19,365.50	
4.	(604) Delayed income credits (p. 323)	.....	54,040.97	
5.	(605) Unrefundable overcharges	.....	1,967.07	
6.	(606) Donations (p. 323)	.....	13,506.61	
7.	(607) Miscellaneous credits (p. 323)	.....	13,350.90	
8.	Debit balance transferred from Income (p. 301)	3,518,575.00	.....	
9.	(613) Surplus applied to sinking and other reserve funds (p. 322)	.....	.....	
10.	(614) Dividend appropriations of surplus (p. 302)	.....	.....	
11.	(615) Surplus appropriated for investment in physical property (p. 322)	13,506.61	.....	
12.	(616) Stock discount extinguished through surplus	.....	.....	
13.	(617) Debt discount extinguished through surplus	66,615.12	.....	
14.	(618) Miscellaneous appropriations of surplus (p. 322)		.....	
15.	(619) Loss on retired road and equipment (p. 323)	126,691.52	.....	
16.	(620) Delayed income debits (p. 323)	.....	.....	
17.	(621) Miscellaneous debits (p. 323)	2,340.23	.....	
18.	*Debit balance carried to Balance Sheet	.....	779,666.57	
19.	Total	3,727,728.48	3,727,728.48	

300D. Dividends Declared During the Year

Give articulars of each dividend declared during the year and charged to Income or to Profit and Loss. If any such dividend was payable in anything other than cash, explain the matter fully in a footnote. If an obligation of any character has been incurred for the purpose of procuring funds for the payment of any dividend or for the purpose of replenishing the treasury of the respondent after payment of any dividend, give full particulars in a footnote; if none has been incurred for such purpose, state that fact.

Line No.	Name of security on which dividend was declared (a)	Rate per cent: Regular (b)	Rate per cent: Extra (c)	Par value of amount on which dividend was declared (d)	Distribution of charge: Income (e)	Distribution of charge: Profit and loss (f)	Date: Declared (g)	Date: Payable (h)
41.	None							
42.								
43.								
44.								
45.								
46.								
47.								
48.								
49.								
50.								
51.								
52.								
53.								

*Insert "Debit" or "Credit" as may be appropriate.

(Here follow statements marked side folio pages 509, 510-512, 513, 513½, 514, 515, 515-1, 515-2, 515-3, 515-4, 515-5, 516.)

TOO

LARGE

FOR

FILMING

CHART

TOO

LARGE

FOR

FILMING

WILLAPA HARBOR TRAFFIC ASSN. EXHIBIT A.

BEFORE THE
DEPARTMENT OF PUBLIC WORKS OF WASH.
CAUSE NO. 8119

PROTESTANTS NO. A
EXHIBITS

INVOLVING RATES ON SAW LOGS CAR LOADS BETWEEN STATIONS IN THE STATE OF WASHINGTON
STATEMENT OF LOGS SHIPPED VIA THE CHICAGO, MILWAUKEE AND ST. PAUL RAILWAY CO. BY THE LEWIS MILLS & TIMBER CO., WARREN LOGGING CO., RAYMOND LUMBER CO. AND SUNSET TIMBER CO. DURING THE YEAR 1920.

PREPARED BY THE WILLAPA HARBOR TRAFFIC ASSOCIATION -- RAYMOND, WASH.

TO SUNSET DUMP FROM		MILES	TOTAL CARS	TOTAL FEET SHIPPED	RATE JUNE 24th 1918	AMOUNT OF FREIGHT	TOTAL FEET SHIPPED JAN. 1st TO AUG. 1st, 1920	RATE AUG. 25th 1920 C.C. #28	AMOUNT OF FREIGHT CHARGES COLLECTED	TOTAL FEET SHIPPED SEPT. 1st, TO DEC. 31st, 1920	RATE AUG. 26th 1920 EXPARTE #74	AMOUNT OF FREIGHT CHARGES COLLECTED	TOTAL AMOUNT OF FREIGHT CHARGES COLLECTED 1920.
				FEET	¢	$	FEET		$	FEET		$	$
MOOSE.	Wn	5.0	319	2 891 950	105	2 400 86		151½		2 891 950	164½	3 770 26	3 770 26
FIRDALE.	"	8.8	882	2 913 741	105	3 058 88	1 684 016	151½	2 801 71	1 858 725	164½	2 070 60	4 872 31
SUTICO.	"	9.9	7 180	60 107 640	105	63 113 02	42 464 310	151½	66 805 71	17 643 330	164½	29 013 27	85 328 98
MACPHAIL.	"	13.0	261	2 296 230	115	2 640 66	389 640	144	542 58	1 936 690	180	3 486 04	4 028 59
BEDFORD.	"	15.2	1 757	15 615 788	115	15 655 85	7 865 670	144	11 429 48	5 748 118	180	10 346 61	21 806 09
BURT.	"	15.9	1 918	15 404 364	115	17 715 02	10 689 381	144	15 457 95	4 715 013	180	8 487 02	23 944 95
DAVIS.	"	17.4	2 491	20 156 264	125	25 195 33	16 853 044	156½	25 647 48	4 903 200	195½	9 585 75	35 133 23
TOTAL			14 448	116 782 977		129 784 81	78 286 951		111 494 86	38 497 026		66 769 55	178 264 41

RATE IN CENTS PER 1000 BM FEET FOR CARS EQUIPPED WITH PATENT BUNKS, MINIMUM 7,000 FEET FOR CARS OVER 60,000 LBS. CAPACITY AND 6,000 FEET FOR CARS OF 60,000 LBS AND UNDER CAPACITY.

TARIFFS CM&STP - GFD 11850-A,WPS 96 - GFD 12549-G,WPS 16 - GFD 13028-A.
TOTAL INCREASE IN RATES SINCE JUNE 24,1918 - 56.7% ACTUAL INCREASE IN FREIGHT CHARGES COLLECTED OVER RATES IN EFFECT JUNE 24,1918 $48,479.60 .

-- SUMMARY --

Average cars in service 1920	cars	140.		Average revenue per net ton mile as of June 24,1918	(cents)	.02187
" BM feet per car as charged by carrier	feet	8.083	(A)	" " " " " " year 1920	(cents)	.02006
" net tons per car @ 8 lbs. per BM feet	tons	32.32		" " " " " " as of present rates	(cents)	.03266
" loaded haul per car	Miles	12.7		" " " loaded car mile as of June 24,1918	(cents)	71.2
" empty " " "	"	12.7	(B)	" " " " " " year 1920	(cents)	99.6
" loaded and empty mileage per round trip	"	25.4		" " " " " " as of present rates	(cents)	106.9
Gross tons per car 32.33 plus 30	tons	62.35		" " " mile of main line used as of June 24th,1918	$	7 460.00
Gross ton miles 62.33 x 14.448 x 12.7 miles		11,487,996				
Revenue per 1000 gross ton miles	¢	17.38	(C)	" " " " " " " " used year 1920	$	11 845.00
Carriers operating expense per 1000 gross ton miles	¢	9.56		" " " " " " " " as of present rates	$	11 604.00
(See CM&STP Exhibits 11-12-13-14-15)						
Net revenue per 1000 gross ton miles	¢	7.82	(A)	Note CM&STP report for year 1920 shows average all traffic for state	(cents)	.00,992
Average revenue per car as of June 24,1918	¢	8.98				
" " " " during year 1920	¢	12.34	(B)	" " " " " " " average all traffic for state	(cents)	.24205
" " " " as of present rates	¢	13.57				
			(C)	" " " " " " " average all traffic for state	$	6 764.80

WILLAPA HARBOR TRAFFIC ASSN. EXHIBIT B.

EXHIBIT NO. B
WITNESS:_____

BEFORE THE

DEPARTMENT OF PUBLIC WORKS OF WASHINGTON.

CAUSE NO. 81.89.

INVOLVING RATES ON SAW LOGS CAR LOAD BETWEEN STATIONS IN THE STATE OF WASHINGTON.

COMPARATIVE STATEMENT OF 40 COMMODITY LOG RATES WITHIN THE STATE OF WASHINGTON BETWEEN POINTS ON THE C.M.&.ST.P.RY. AS TAKEN FROM C.M.&.ST.P. TARIFF 12625-A I.C.C. NO. B-5804 AS OF APRIL 1st, 1921.

FROM	TO	RATE	CARS	M 5	I 10	L 15	E 20	S 25	30	35	40
Glacier, Wn.	Maples Falls, Wn.	8.15	1			x Equal to $1.15 per 1000 feet.					
Knights Spur, Wn.	" " "	9.40	1		x	Equal to $1.35 per 1000 feet.					
Columbia, Wn.	Mt.Baker Hill "	9.40	1		x	Equal to $1.35 per 1000 feet.					
Cedar Fall, Wn.	Sellesk, Wn.	1.55	1		x						
High Rock, Wn.	Everett, Wn.	1.40½	20				x				
Stillwater, Wn.	" "	1.54½	20						x		
" "	Snohomish, Wn.	1.54½	20					x			
Bordeaux Spur, Wn.	Gregory, Wn.	1.44½	1			x					
Cedarville, Wn.	Preachers Slu, Wn.	1.44½	15			x					
Duvall, Wn.	Everett, Wn.	1.44½	10					x			
High Rock, Wn.	" "	1.44½	10				x				
Monroe, Wn.	" "	1.44½	10			x					
Snohomish, Wn.	S "	1.44½	10		x						
Stillwater, Wn.	" "	1.44½	10						x		
Kirby, Wn.	Tacoma, Wn.	1.44½	1			x					
Electron, Wn.	" "	1.44½	1					x			
Tidewater, Wn.	" "	1.44½	1					x			
Nols, Wn.	" "	1.44½	1						x		
Calpenhem, Wn.	" "	1.44½	1					x			
MOOSE, WN.	SUNSET DUMP, WN.	1.44½	1	x							
SUTICO, WN.	" " "	1.44½	1		x						
Cedarville, Wn.	Hoquiam, Wn.	1.72	15								x
Kulshan, Wn.	Bellingham, Wn.	1.72	15					x			
Welcome Siding, Wn.	" "	1.72	15					x			
SUTICO, WN.	RAYMOND, WN.	1.80	1			x					
BEDFORD, WN.	" "	1.80	1				x				
BURT, WN.	" "	1.80	1				x				
BEDFORD, WN.	SUNSET DUMP, WN.	1.80	1			x					
BURT, WN.	" " "	1.80	1				x				
Carnation, Wn.	Everett, Wn.	1.80	10							x	
Klueglide, Wn.	Ione, Wn.	1.97½	10			x					
Maple Falls, Wn.	Sumas, Wn.	1.95½	1			x					
Nelsing Jct. Wn.	Preachers Slu, Wn.	1.95½	15							x	

513½

FROM	TO	RATE	CARS	5	10	15	20	25	30	35	40
						M	I	L	E	S	
Wilsons Spur, Wn.	Preachers Slu, Wn.	1.95½	15								x
DAVIS, WN.	SUNSET DUMP, WN	1.95½	1				x				
DAVIS, WN.	RAYMOND, WN.	1.95½	1				x				
Berkley, Wn.	Tacoma, Wash.	1.95½	1			x					
Skewis, Wn.	" "	1.95½	1						x		
Eatonville, Wn.	" "	1.95½	1							x	
Snoqualmie Spur, Wn.	Riverview, Wn.	1.95½	30								x

S U M M A R Y

RATES	NUMBER OF RATES	5	10	15	20	25	30	35	40
				M	I	L	E	S	
1.15	1			x					
1.35	2			x					
1.40½	1				x				
1.54½	1					x			
1.56½	1						x		
1.64½	1			(x)					
1.64½	2			(x)					
1.64½	4			x					
1.64½	1				x				
1.64½	4					x			
1.64½	2						x		
1.72	2					x			
1.72	1								x
1.80	2			(x)					
1.80	3				(x)				
1.87½	1			x					
1.95½	2			x					
1.95½	2				(x)				
1.95½	1						x		
1.95½	1							x	
1.95½	3								x

NOTE

(1) RATE Moose to Sunset Dump 5.0 Miles $1.64½ to Raymond 6.5 Miles $1.64½
Firdale " " " 8.2 " 1.64½ " " 9.7 " 1.64½
Sutico " " " 9.9 " 1.64½ " " 11.4 " 1.80
Macphail " " " 13.0 " 1.80 " " 14.5 " 1.80
Bedford " " " 15.2 " 1.80 " " 16.7 " 1.80
Burt " " " 15.9 " 1.80 " " 17.4 " 1.80
Davis " " " 17.4 " 1.95½ " " 18.9 " 1.95½

(2) AVERAGE RATES AS TAKEN FROM THE DEPARTMENT OF PUBLIC WORKS RATE EXHIBIT NO. 1

	WEST OF CASCADES					EAST OF CASCADES				
	NP	GN	CM&STP	C&W	COMBINED	NP	GN	CM&STP	C&W	COMBINED
1 to 10 Miles	1.389	1.665	1.584	1.670	1.586	1.565	1.851		1.565	1.795
11 to 15 Miles	1.548	1.760	1.729	1.799	1.717	1.955	2.228	1.875	1.720	2.001
16 to 20 Miles	1.789	2.260	1.758	1.862	1.856	2.115	2.240	1.685	2.035	2.045

STATE AS A WHOLE

NP	GN	CM&STP	C&W	COMBINED
1.419	1.815	1.584	1.660	1.653
1.606	1.994	1.744	1.792	1.762
1.849	2.250	1.739	1.911	1.910

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WILLAPA HARBOR TRAFFIC ASSN. EXHIBIT NO. C.

C A U S E N O . 5159

BEFORE THE
DEPARTMENT OF PUBLIC WORKS
OF WASHINGTON

EXHIBIT NO. C
WITNESS:_____

STATEMENT OF LOG CAR MOVEMENT ON C.M.&.ST.P.RY. DURING MONTH OF NOVEMBER 1920 AS TAKEN FROM PAID FREIGHT BILLS AND SCALE SHEETS

SYMBOLS--BD - BEDFORD, 15.4 MILES, B - BURT, 16.3 MILES, D - DAVIS, 17.7 MILES; F - FIRDALE, 8.3 MILES, M - MOOSE, 5.1 MILES, MC - MACPHAIL, 13.2 MILES, S - SUTICO, 9.9 MILES.

INITIAL	NUMBER	DATE SCALED AND POINT OF SHIPMENT. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	DAYS IN SERVICE	NO. OF TRIPS	AVGE DAYS PER TRIP	& MILEAGE LOADED	EMPTY	TOTAL
PS&WH	32101			B			S			BD			S		S			S				S				S						30	8	3.75	84.7	84.7	169.4
PS&WH	32201		BD		S		BD					B		S		S		F				S			BD			M			M	30	11	2.72	120.6	120.6	241.2
PS&WH	45601			S		BD				S		S			S			B		B				B			S			M		30	10	3.00	118.9	118.9	237.8
TE	2001																		S					S	S		M			F	15	5	3.00	43.1	43.1	86.2
TE	2302																				D			M			D				12	3	4.00	40.5	40.5	81.0
PS&WH	32103		D		B		D			D					BD			S				S		BD			M			F	30	10	3.00	133.4	133.4	266.8
PS&WH	32203	BD		BD	S		S				B			BD			S			B		D		D		S	M			B	30	13	2.30	175.2	175.2	350.4
PS&WH	45603		S		S					B		S		S					BD				S		S		M			D	30	10	3.00	112.5	112.5	225.0
PS&WH	32105			S		S				S		B		BD			S			B			S		S		M			D	30	11	2.72	130.2	130.2	260.4
PS&WH	32205		S		S				BD				D				B				S		S			BD				D	30	9	3.33	122.1	122.1	244.2
PS&WH	45605			S		S			S		S	F											S		S		B			M	30	9	3.33	89.1	89.1	178.2
PS&WH	32107				B		B			B		S			BD	M			S					S				B			B	30	10	3.00	123.7	123.7	247.4
PS&WH	32207			S		S			S		S	F		BD				S					S	S		B				M	30	11	2.72	114.4	114.4	228.8
PS&WH	45607	D				B			S		S	S		BD		D					D			M			D				30	10	3.00	137.3	137.3	274.6
PS&WH	32109			S			S																								7	2	3.50	19.8	19.8	39.6
PS&WH	32209	E		D		D				D			BD	B					S				B		M		BD			BD	30	12	2.50	163.2	163.2	326.4
PS&WH	45609		BD		BD				B		D		B		B	B			B					S	S		M				30	10	3.00	138.6	138.6	277.2
PS&WH	32111	E		D			D			S			S			S			BD					S	S		M				30	10	3.00	121.7	121.7	243.4
PS&WH	32211	BD		BD		S			S				BD					S	M	M			M		D		B				30	11	2.72	125.2	125.2	250.4
PS&WH	45611			B		S				S			S	BD				S					S		S	B				B	30	10	3.00	123.7	123.7	247.4
PS&WH	32113		S		B		F			B			S	S			F		S				S			B		F			30	11	2.72	122.4	122.4	244.8
PS&WH	32213						BD				B			S			B		B					BD							30	6	5.00	89.6	89.6	179.2
PS&WH	45613			D			D					D		B					B				S		S					S	30	8	3.75	115.4	115.4	230.8
PS&WH	32115	D			B		F			B			S	S					B			S			S			M		S	30	11	2.72	129.5	129.5	259.0
PS&WH	32215			S			BD					B				D				S				BD						D	30	7	4.28	102.3	102.3	204.6
PS&WH	45615			S			B			B				F		S		M		M			B			S			BD	30	10	3.00	112.5	112.5	225.0
TE	2416																			D		D			BD				S	12	4	3.00	60.7	60.7	121.4
PS&WH	32117			F		F			S				BD			S		S		M				S			BD		S	B	30	11	2.72	118.3	118.3	236.6
PS&WH	32217			S			B			BD		S		S			M		BD		D		D		S	M					30	11	2.72	132.3	132.3	264.6
PS&WH	45617			B		S				F		S		S			F		B					BD			M			S	30	11	2.72	125.6	125.6	251.2
PS&WH	32119			S		BD			S	S			BD					BD		M					S		M			S	30	10	3.00	105.9	105.9	211.8
PS&WH	32219		BD		S		BD					B		S		S		F				S			BD					M	30	10	3.00	115.5	115.5	231.0
PS&WH	45619		S		S		BD			B			S										BD	D			F				30	8	3.75	102.8	102.8	205.6
CM&STP	45919																	S		M					F			B		S	15	5	3.20	49.5	49.5	99.0
TE	2720																			D			B			M		BD			14	4	3.66	54.3	54.3	108.6
		35	6	8	18	11	11	16	0	10	13	9	8	13	15	6	6	14	12	11	10	8	0	13	14	15	11	10	20	0	9	15	916	312	2.94	3774.5	3774.5	7549.0

EXHIBIT NO._____

INITIAL	NUMBER	DATE SCALED AND POINT OF SHIPMENT. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	DAYS IN SERVICE	NO. OF TRIPS	AVGE DAYS PER TRIP	MILEAGE LOADED	MILEAGE EMPTY	MILEAGE TOTAL
PS&WH	32121	BD S BD B S S F	30	10	3.00	121.2	121.2	242.4
PS&WH	32221	BD BD S S S F BD S S B F	30	12	2.50	134.6	134.6	269.2
PS&WH	45621	D B D BD BD S S S	30	9	3.33	122.1	122.1	244.2
TE	2421	S S S S	15	4	3.75	39.6	39.6	79.2
PS&WH	32123	F S S S F S S BD F	30	9	3.33	89.8	89.8	179.6
PS&WH	32223	S B BD S S M BD D D M BD	30	11	2.72	137.8	137.8	275.5
PS&WH	45623	D F S S S S M M BD BD D	30	12	2.50	134.2	134.2	268.4
TE	2124	D BD BD BD	15	4	3.75	66.2	66.2	132.4
PS&WH	32125	F S B S B B D S M F	30	10	3.00	118.0	118.0	236.0
PS&WH	32225	S D D BD S B S S S	30	9	3.33	116.6	116.6	233.2
PS&WH	45625	D S BD S B S S	30	7	4.28	89.0	89.0	178.0
PS&WH	32127	BD BD S S S BD S S S BD BD	30	11	2.72	136.6	136.6	273.0
PS&WH	32227	B D D D B M B S M	30	9	3.33	122.1	122.1	244.2
PS&WH	45627	S B S S BD S B S M S B S	30	12	2.50	138.7	138.7	277.4
TE	2627	F B M	9	3	3.00	29.7	29.7	59.4
PS&WH	45729	BD	2	1	2.00	15.4	15.4	30.8
PS&WH	32229	S S B S S S F S S B M	30	12	2.50	125.2	125.2	250.4
PS&WH	45629	B D S BD BD S S BD B S	30	10	3.00	136.1	136.1	272.2
PS&WH	32131	S S B D D S S M BD	30	9	3.33	111.8	111.8	223.6
PS&WH	32231	D B D BD BD S S S B B	30	10	3.00	144.8	144.8	289.6
PS&WH	45631	D BD B F D F M BD D S	30	10	3.00	130.8	130.8	261.6
PS&WH	32133	B D D D BD B S B F M S M	30	12	2.50	155.7	155.7	311.4
PS&WH	32233	S D S BD BD S S BD F B BD	30	11	2.72	143.5	143.5	287.0
PS&WH	45633	F S S BD BD S S S D B BD	30	11	2.72	138.0	138.0	276.0
TE	2133	M M M M S	14	5	2.80	30.3	30.3	60.6
CM&STP	45733	D D S M BD	10	5	2.00	65.8	65.8	131.6
PS&WH	32135	S BD S S BD D S S B S	30	10	3.00	124.2	124.2	248.4
PS&WH	32235	S S BD B S S F BD S S D	30	11	2.72	132.5	132.5	265.0
PS&WH	45635	BD BD S S BD BD S S S S	30	10	3.00	121.0	121.0	242.0
PS&WH	32137	S S S S D F M S S S M F	30	12	2.50	113.8	113.8	227.6
PS&WH	32237	B D D B B S S S	30	8	3.75	114.0	114.0	228.0
PS&WH	45637	B D S BD D B S B BD M	30	10	3.00	140.0	140.0	280.0
PS&WH	32139	D BD B B S S S	30	7	4.28	95.4	95.4	190.8
PS&WH	32239	B D D BD D F S BD M	30	9	3.33	123.5	123.5	247.0
PS&WH	45639	S BD S S BD S B B S BD	30	10	3.00	128.3	128.3	256.6
TE	2639	S S F B S D	24	6	4.00	72.0	72.0	144.0
TE	2540	D B F S	14	4	3.50	52.2	52.2	104.4
		37 10 9 13 15 9 13 0 14 12 10 5 7 22 5 13 8 15 13 5 11 0 17 12 20 6 11 16 0 19 15	973	325	3.00	4010.4	4010.4	8020.8

EXHIBIT NO._____

INITIAL	NUMBER	DATE SCALED AND POINT OF SHIPMENT																														DAYS IN SERVICE	NO. OF TRIPS	AVGE DAYS PER TRIP	MILEAGE		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				LOADED	EMPTY	TOTAL
PS&WH	32141			S		F								S		S				S				S				BD		M	30	8	3.75	78.3	78.3	156.6
PS&WH	32241		D		S				S	S			BD					BD						F				D			30	8	3.75	104.2	104.2	208.4
PS&WH	45641			F			F			B			S	S			F			S				S				M			30	9	3.33	85.9	85.9	171.8
TE	2141																				D			M			D				12	3	4.00	40.5	40.5	81.0
PS&WH	32143			B		S			S	S			BD					BD						F		B				B	30	9	3.33	119.5	119.5	239.0
PS&WH	32243		S		S				B					BD					M	M				M	M		S			B	30	10	3.00	98.1	98.1	196.2
PS&WH	45643	S		BD		S			S					S		S		S					S		BD			M		M	30	11	2.72	111.3	111.3	222.6
TE	2743																		F		D			B			S			BD	14	5	2.80	67.6	67.6	135.2
CM&STP	45843																S		F					BD		BD				S	15	5	3.20	58.9	58.9	117.8
PS&WH	32145																							M		S				D	9	3	3.00	32.7	32.7	65.4
PS&WH	32245	S		S		B			S	S			BD					BD		M					S					S	30	10	3.00	111.6	111.6	223.2
PS&WH	45645	D			B				D			BD				F		S					S		S					S	30	9	3.33	115.0	115.0	230.0
PS&WH	32147	S		S		B			S		S			S		S		F					S		S		S			M	30	12	2.50	124.8	124.8	249.6
PS&WH	32247		S			D				D			S	S			M				BD			M			D				30	9	3.33	108.4	108.4	216.8
PS&WH	45647			S			S		B					D			B				S										30	6	5.00	80.0	80.0	160.0
PS&WH	32149		B		D		S			BD				D	B			B	S					B				BD	M		B	30	12	2.50	172.6	172.6	345.2
PS&WH	32249	S		S		B				F			S			S	D	M						B		F				S	M	30	12	2.50	126.6	126.6	253.2
PS&WH	45649			S		S			S		BD			BD			S		B					S				F			30	9	3.33	104.9	104.9	209.8
PS&WH	32151			B		S				F			S				D						D		D			BD			B	30	9	3.33	129.2	129.2	258.4
PS&WH	32251			S			S			BD		S		S			M				BD		M			D		B		M	30	11	2.72	119.7	119.7	239.4
PS&WH	45551	S		D		D																										6	3	2.00	45.3	45.3	90.6
PS&WH	45651			S			BD					B		S		S		F			S			M			D				S	30	10	3.00	112.3	112.3	224.6
TE	2552																	D		S					S				D			15	4	3.74	55.2	55.2	110.4
PS&WH	32153	S			BD		S			S		S				D				S				BD				BD		M		30	10	3.00	118.5	118.5	237.0
PS&WH	32253		BD		BD		S			S			S	S		M		S			BD		M			BD				BD		30	12	2.50	136.7	136.7	273.4
PS&WH	45553				B				BD				S		BD			K	S					B		S					S	30	9	3.33	108.1	108.1	216.2
PS&WH	45653		S		S				S	BD			BD			S		B		M				M			D		B			S	30	12	2.50	140.8	140.8	281.6
PS&WH	32155			F		F			S			B		S			S		M		M			BD			S			D	30	11	2.72	115.8	115.8	231.6
PS&WH	45555		F		BD		S			S		S		D				D			S				S				D			30	10	3.00	127.9	127.9	255.8
PS&WH	45655				B								S		BD				S					B		S				S		30	7	4.28	87.6	87.6	175.2
PS&WH	32157	BD		BD		S		S			BD			BD			S		S						BD				M			30	10	3.00	121.7	121.7	243.4
PS&WH	45557				S		BD			S	S			BD					BD					F		B			F		BD	30	10	3.00	124.2	124.2	248.4
PS&WH	45657		S		S				B		F			D					D		S				S				M		BD		BD	30	11	2.72	135.5	135.5	271.0
TE	2458																	S		D		D		B			BD				BD	15	6	2.50	92.4	92.4	184.8
PS&WH	32159				F		S				BD			BD			S		S						BD			B		M			30	9	3.33	105.6	105.6	211.2
PS&WH	45559			F		S			S				S				S		B							S			B			F	30	9	3.33	98.7	98.7	197.4
PS&WH	45659	S			BD		S			S			BD	S				F		S				S			B		F			BD	30	12	2.50	138.5	138.5	277.0
PS&WH	32161		S		S				B		S		F		BD				S		BD						D				B		30	10	3.00	129.0	129.0	258.0
PS&WH	45661	S		S		S			S		S		S						BD						S		S		M			B	30	11	2.72	116.0	116.0	232.0
		39	10	9	18	15	14	11	0	16	16	7	6	16	18	5	11	11	17	14	8	11	0	14	19	11	13	9	16	0	21	10	1048	346	3.03	4027.6	4027.6	8055.2

SHEET ---: 4 :---

EXHIBIT NO._____

INITIAL	NUMBER	DATE SCALED AND POINT OF SHIPMENT																															DAYS IN SER- VICE	NO OF TRIPS	AVGE DAYS PER TRIP	MILEAGE LOADED	MILEAGE EMPTY	MILEAGE TOTAL
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30						
PS&WH	32163	S		S		B			S		S			S			B			L					D			S			S	30	11	2.72	135.9	135.9	271.8
PS&WH	45565											D		B						D						D				B		30	5	6.00	85.7	85.7	171.4
PS&WH	45665		S		S		S			S			S		BD		D						S			BD		B				30	10	3.00	135.9	135.9	271.8
TE	2063																S			S				BD								15	3	5.33	35.2	35.2	70.4
TE	2563																							B				D					9	2	4.50	34.0	34.0	68.0
PS&WH	32165	D			F		S			S			S	S				B		M			M			BD				M		30	11	2.72	112.6	112.6	225.2
PS&WH	45565		BD			D				D			S		BD				BD				B		F					S		30	9	3.33	126.0	126.0	252.0
PS&WH	45565	B		BD		S			S	S			BD						S					S		S					D	30	10	3.00	124.2	124.2	248.4
TE	2065																		D				B				D					14	3	3.66	51.7	51.7	102.4
PS&WH	32167			S		F			S			BD	S		M		S			BD		M		S		B				S		30	12	2.50	125.0	125.0	250.0
PS&WH	45567		BD		BD		S			S		S		D				D		S				S			B					30	10	3.00	132.0	132.0	264.0
PS&WH	45667			S		B				F		S		S		M		S			B			B			S			BD		30	11	2.72	127.2	127.2	254.4
PS&WH	32169	S		S		S			S		S			D			D			BD	M				BD			S					30	11	2.72	130.7	130.7	261.4
PS&WH	45569			F		F			S			BD			S		B			M			M				M			S		30	10	3.00	93.3	93.3	186.6
PS&WH	32171	S		S		B				F			S	S		M		S			B			B			S				BD		30	12	2.50	136.2	136.2	272.4
PS&WH	45571			S			S			BD			S			D				S				BD				BD		M		30	9	3.33	108.6	108.6	217.2
PS&WH	32173			S		S				F			S				D	M			B			B						S		30	9	3.33	103.3	103.3	206.6
PS&WH	45573								D			BD				D				S				BD			F	F				30	7	4.28	92.7	92.7	185.4
PS&WH	45673									BD				BD		S			S		BD				D			S			S	30	8	3.75	103.5	103.5	207.0
TE	2474																	D			S				S					S		15	4	3.50	47.4	47.4	94.8
PS&WH	32175			S			BD								S		M			M				B		D	S			BD		30	9	3.33	105.6	105.6	211.2
PS&WH	45575			S	B		F			B			S			B		M					B		S		S					30	10	3.00	118.2	118.2	236.4
PS&WH	45675					F			B			D				B	M			S				S			B				B	30	9	3.33	116.1	116.1	232.2
PS&WH	32177		S		S				S		S		S		BD	M				S				S			BD				D	30	11	2.72	122.9	122.9	245.8
PS&WH	45577	B		D			D			D				BD			B			B				D			F			M		30	10	3.00	148.5	148.5	297.0
PS&WH	45677			B		F			S			B		S			M						S				D			M	S	30	10	3.00	108.4	108.4	216.8
PS&WH	32179			B		S			S	S			BD						BD				S					B			S	30	9	3.33	112.9	112.9	225.8
PS&WH	45579		B		D		S							D		F		M			BD				D			S				30	9	3.33	118.0	118.0	236.0
PS&WH	45981																				D				D			M			F	12	4	3.00	48.8	48.8	97.6
PS&WH	32181		S		S				S		F			D			B				S				S					S		30	9	3.33	101.7	101.7	203.4
PS&WH	45581								D			BD			F					BD	M			BD				S			B		30	8	3.75	103.5	103.5	207.0
PS&WH	45681	BD		BD			S			BD		S		S			M			BD			D			BD				BD		30	11	2.72	144.9	144.9	289.0
	32	7	6	15	7	11	10	0	12	14	4	8	12	14	3	11	12	10	6	14	12	0	10	12	12	5	11	14	0	12	12	876	276	3.17	3390.6	3390.6	6781.2

SHEET ---: 5 :--- EXHIBIT NO._____

INITIAL	NUMBER	DATE SCALED AND POINT OF SHIPMENT 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	DAYS IN SERVICE	NO. OF TRIPS	AVGE DAYS PER TRIP	MILEAGE LOADED	MILEAGE EMPTY	MILEAGE TOTAL
PS&WH	32183			S			BD					B		S			F			S				S			BD			D		30	9	3.33	112.7	112.7	225.4
PS&WH	45583			S			B				BD					F		S		M		M			BD							30	8	3.75	85.4	85.4	170.8
PS&WH	45683		BD		BD				B		F			D				D			BD	M				BD			S			S	30	11	2.72	146.5	146.5	293.0
TE	2284																							F			B				M	9	3	3.00	29.7	29.7	59.4
PS&WH	32185		D		B				D		BD			BD			S		S						S		B				M	30	10	3.00	133.6	133.6	267.2
PS&WH	45585			S			BD					B		S		D					S			BD			F			M		30	9	3.33	107.9	107.9	215.8
PS&WH	45685	D				B			S		S					S		B					S		S			B					30	9	3.33	116.1	116.1	232.2
TE	2186																				D			M			D						12	3	4.00	40.5	40.5	81.0
PS&WH	32187			S		S			S		S			S			B			B				D				F		M		30	10	3.00	113.2	113.2	226.4
PS&WH	45587		B		D		S				BD			BD		S			S		BD				D					S		30	10	3.00	137.5	137.5	275.0
PS&WH	45687		D		BD				B		F					D			S				S		BD					S		30	9	3.33	120.5	120.5	241.0
PS&WH	32189				F		S			S			S	S				B			S				S					D		30	9	3.33	101.7	101.7	203.4
PS&WH	45589		BD		BD				B		F			D			D			BD	M				BD					S		30	10	3.00	136.6	136.6	273.2
PS&WH	32191			S			S		B			D		B				D		S				S				BD		M		30	10	3.00	128.1	128.1	256.2
PS&WH	45691	D			B		D			D				BD		S		B			S				S					S		30	10	3.00	140.7	140.7	281.4
PS&WH	45691			S		B			S	S			F		BD			S					S		S					S		30	10	3.00	109.3	109.3	218.6
PS&WH	32193		D		B					BD			S		BD				S							D		B				30	8	3.75	118.6	118.6	237.2
PS&WH	45593			S			BD					B					D	M					B		F					S	M	30	9	3.33	104.0	104.0	208.0
PS&WH	45693	S		S		B			S		S			S			S				B			B			S			M		30	11	2.72	114.3	114.3	228.6
PS&WH	32195		S		BD		S			S		S		D					D					S		S		M			B	30	11	2.72	131.6	131.6	263.2
PS&WH	45595				B					BD			S		BD				S		BD				D			S				30	8	3.75	109.9	109.9	219.8
PS&WH	45695	S		S			S			BD			S				D	M					B		F					S	M	30	11	2.72	117.4	117.4	234.8
PS&WH	32197			S			S		B					D			B				S				S					S		30	8	3.75	99.8	99.8	199.6
PS&WH	45597			S			S			BD				D		F		M			BD				D		S				D	30	10	3.00	127.0	127.0	254.0
PS&WH	45697			BD	S		S			S			S		BD			S			BD		M		S		B				S	30	12	2.50	136.9	136.9	273.8
PS&WH	32199			B		S			S	S										BD				S		S				B	S	30	9	3.33	107.4	107.4	214.8
PS&WH	45599		BD		D		S				BD		BD			F		S		M		M					S			BD		30	11	2.72	127.5	127.5	255.0
PS&WH	45699	S			S				B			D					B	M		S								D				30	8	3.75	102.8	102.8	205.6
	28	5	8	13	13	5	14	0	12	10	10	6	7	14	6	7	12	9	10	6	13	0	6	10	15	3	11	6	0	18	7	801	256	3.13	3156.2	3156.2	6312.4

SHEET ---: 6 :--- EXHIBIT NO._____

SUMMARY

SHEET	DATE SCALED AND POINT OF SHIPMENT																													DAYS IN SERVICE	NO. OF TRIPS	AVGE DAYS PER TRIP	MILEAGE		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				LOADED	EMPTY	TOTAL
#1	6	8	18	11	11	16	0	10	13	9	8	13	15	6	6	14	12	11	10	8	0	13	14	15	11	10	20	0	9	15	916	312	2.94	3774.5	3774.5	7549.0
#2	10	9	13	15	9	13	0	14	12	10	5	7	22	5	13	8	15	13	5	11	0	17	12	20	6	11	16	0	19	15	973	325	3.00	4010.4	4010.4	8020.8
#3	10	9	18	15	14	11	0	16	16	7	6	16	18	5	11	11	17	14	8	11	0	14	19	11	13	9	16	0	21	10	1048	346	3.03	4027.6	4027.6	8055.2
#4	7	6	15	7	11	10	0	12	14	4	8	12	14	3	11	12	10	6	14	12	0	10	12	12	5	11	14	0	12	12	876	276	3.17	3390.6	3390.6	6781.2
#5	5	8	13	13	5	14	0	12	10	10	6	7	14	6	7	12	9	10	6	13	0	6	10	15	3	11	6	0	18	7	801	256	3.13	3156.2	3156.2	6312.4
TOTAL	38	40	77	61	50	64	0	64	65	40	33	55	83	25	48	57	63	54	43	55	0	60	67	73	38	52	72	0	79	59	4614	1515	3.04	18359.3	18359.3	36718.6

(E) NUMBER OF CARS IN SERVICE 171. CARS SHIPPED 1,515. FEET SHIPPED 10,966,230. FREIGHT CHARGES COLLECTED $21,328.20

Average time cars in service days	26.9	Loaded miles hauled (MILES)	183,593	Average freight revenue per car	$14.07
Average trips each car for month trips	8.86	Empty " " "	183,593	(b) Average freight revenue per car per loaded mile	$ 1.16
(a) Average days required per car per trip Days	3.04	Total " " "	367,186	Average freight revenue per car loaded and empty per round trip (CENTS)	.58
Average feet per car ----------FEET	7,238	Gross Ton Miles 29 plus 30 equals 59 x 12.13---------	1,084,240	(c) Average revenue per ton mile (CENTS)	04.008
Average tons per car ----------TONS	28.95	Average loaded miles per car per trip	12.13	(d) Average revenue per 1000 gross ton miles	$ 19.69
		Average loaded and empty miles per car per round trip	24.25		

(A) NOTE C.M.&.ST.P. TESTIMONY OF FROM 5 TO 10 DAYS AS AVERAGE TRIP MOVEMENT

(B) NOTE C.M.&.ST.P. REPORT FOR YEAR 1920 SHOWS AVERAGE ALL TRAFFIC ENTIRE STATE .24205 CENTS.

(C) " " " " " " " " " " " " .00992 CENTS.

(D) " " EXHIBITS 11, 12, 13, 14, 15, 16 CLAIMING AVERAGE OPERATING EXPENSE OF $9.56 PER 1,000 GROSS TON MILES ALL FREIGHT.

(E) NOTE ALTHOUGH THERE WERE 171 CARS IN THE AGGREGATE IN SERVICE DURING THE MONTH, 28 WERE CARS BROUGHT IN DURING THE MONTH TO INCREASE THE SUPPLY AND WERE NOT IN THE SERVICE THE FULL MONTH.

COMPILED BY THE WILLAPA HARBOR TRAFFIC ASSOCIATION

RAYMOND, WASHINGTON.

[fol. 516]

WILLAPA HARBOR TRAFFIC ASSN. EXHIBIT D

Before the Department of Public Works of Washington

Cause No. 5159

Involving Rates on Saw Logs Carloads Between Stations in the State of Washington

Statement of Extra Charge Made for Use of Cars Equipped with Patent Stakes or Bunks, During the Year 1920, on Shipments of Logs Made by the Lewis Mills and Timber Co., Warren Logging Co., Sunset Timber Co. and Raymond Lumber Co.

Prepared by the Willapa Harbor Traffic Association, Raymond, Wash.

Shipper	Number of cars shipped	Total feet shipped, 1920	Extra rate chgd. prior to go. #28 June 28th, 1918	Amount of extra charge as of June 27, 1919, prior to go. #28	Total feet shipped Jan. 1st, to Aug. 31, 1920	Extra rate chgd. to. Aug. 26th, 1920	Amount of extra charges actually collected	Total feet shipped Sept. 1st to Dec. 31, 1920	Extra rate chgd. after Aug. 26th, 1920, ex parte #74	Amount of extra charges actually collected	Total amount of extra charges actually collected year 1920
		Feet	¢	$	Feet	¢	$	Feet	¢	$	$
Lewis Mills & Tbr. Co.....	319	2,291,950	.05	114.60	.....	.065	.....	2,291,950	.08	183.36	183.36
Warren Logging Co.....	582	2,912,741	.05	145.64	1,654,016	.065	107.51	1,258,725	.08	100.70	208.21
Sunset Timber Co.....	7,381	62,403,870	.05	3,120.19	42,823,850	.065	2,783.55	19,580,020	.08	1,566.40	3,349.95
Raymond Lumber Co....	6,166	49,174,416	.05	2,458.72	33,808,085	.065	2,197.53	15,366,331	.08	1,229.31	4,426.84
Total	14,448	116,782,977	...	5,839.15	78,285,951	....	5,088.59	38,497,026	....	3,079.77	8,168.36

Average amount charged per car on basis of .05 cents rate prior to June 28, 1918—.404 cents—Average amount charged per car year 1920—.565¢.

Average cars in service during year 1920—140 cars. Average extra revenue per car for year 1920—$58.35.

Average cost of equipping cars with patent bunks in year 1913—$90.00. Average cost of equipping cars with patent bunks during year 1920—$130.00.

Average cost 41 ft. Standard Log Flat complete with patent bunks 1916 and prior—$900.00. No Log Flats in this service of later builders date than 1916.

The Sunset Timber Company in September 1915 sold to the Puget Sound & Willapa Harbor Ry. 24 Standard 40 Ft. decked and 53-38 ft. skeleton type of log cars fully equipped with patent bunks and stakes (channel and chain type) at $642.86 per car for the Standard Flats and $580.26 each for the Skeleton type, which was the depreciated book value of cars which were originally purchased in 1910, 1912 and 1913 at $900.00 and $735.00 respectively. These cars are still in service all being on this Division during the year 1920. The numbers of these cars are PS&WH 32109 to 32133 inclusive—24 and 32149 to 32253 inclusive—53.

Shingles

Production

Red Cedar	484,710,500	
Stocks on Hand	16,773,900	
		*501,484,400 Ft.

Distribution

Shipped by Rail	374,976,500	
Shipped by Water	13,641,400	
Retail	7,036,600	
Not Specified	76,020,700	
In Stock	29,809,200	
		*501,484,400 "

*Based on 1,000 Ft. to 10,000 pieces.

[fol. a] IN SUPREME COURT OF WASHINGTON

[Title omitted]

CLERK'S CERTIFICATE

I, C. S. Reinhart, Clerk of the Supreme Court of the State of Washington, hereby certify that the above and foregoing together with the six volumes accompanying the same comprising in all seven volumes, of which the within is vol. 3 pages 1 to 331 are a full, true and correct transcript of the record in the above-entitled cause, and that in pursuance of the writ of error heretofore received I now transmit the same together with the original writ of error and the original citation which is contained in Vol. 1 hereof.

In testimony whereof, I have hereunto set my hand and affixed the Seal of said Court, this 16th day of April, 1924.

C. S. Reinhart, Clerk of the Supreme Court of the State of Washington. Seal of the Supreme Court, State of Washington.

[fol. b-8] IN SUPERIOR COURT FOR THURSTON COUNTY

No. 8428-29

[Title omitted]

CLERK'S CERTIFICATE

STATE OF WASHINGTON,
County of Thurston, ss:

I, Paul Paulk, Deputy County Clerk and Deputy Clerk of the Superior Court, Thurston County, State of Washington, do hereby certify that the herewith attached are the Original Exhibits, Return from the Department of Public Works and Transcript of Testimony containing Five Volumes, numbered one to five inclusive.

In witness whereof, I have hereunto set my hand and affixed the seal of said Superior Court this 16th day of November, 1922.

Paul Paulk, Deputy County Clerk and Deputy Clerk of the Superior Court, Thurston County, Washington. (Seal.)

[fol. 9] Mr. Clifford: We will call Mr. Calderhead.

O. O. CALDERHEAD, a witness produced on behalf of the Commission, after being first duly sworn, testified as follows:

Direct examination.

Mr. Clifford:

Q. Your name is O. O. Calderhead?
A. Yes sir.
Q. And you are the Traffic Expert of the Department of Public Works, of the State of Washington?
A. Yes.
[fol. 10] Q. I will ask you if you have made an investigation of the log rates in effect in the State of Washington in preparation for this hearing?
A. I have.
Q. Have you embodied that investigation in an exhibit?
A. Yes.
Q. Is this writing that I hand you such exhibit?
A. Yes.
Q. We ask that this be marked for identification Commission's Exhibit "A" and offer it in evidence herein.

(Exhibit so marked.)

The Director: I would like to have any person, except those who are here merely as spectators, that is all who are parties to the con-

troversy if you have not already filled out one of these cards with your name and address etc. kindly step up and get one and fill it out.

Mr. Clifford:

Q. Now I ask you to refer to the writing just introduced in evidence and ask you to state from what the figures contained therein were compiled?

A. That is a statement showing the present commodity and distance rates and minimums on logs in carloads and in trainloads in effect at the present time, and those in effect prior to August 26, 1920, on the lines of the Northern Pacific, Great Northern, Chicago, Milwaukee & St. Paul, and the Oregon-Washington Railroad & Navigation Company, together with mileages between points where specific rates are provided. Also showing rates and minimums in Idaho and Oregon on the same roads in interstate rates between points in Washington and points in Idaho and Oregon, together with a loose leaf showing the average commodity log rate in the State [fol. 11] of Washington on the four lines, segregated as between east of the Cascade Mountains and west of the Cascade Mountains, and showing average commodity rates, not distance tables, but commodity rates of all the lines of all the roads. There is also contained in this exhibit a chart showing rates per thousand feet on the perpendicular scale and the mileage on the horizontal scale. The first graphic shows the Northern Pacific, and that includes both east of the mountains and west of the mountains, and is made for the purpose of showing the discrepancies and differences between rates for similar distances upon the same line of road and upon different lines of road. The last chart indicates the combined of the four railroads. Taking the sheet "E" it will be noticed that on the combined railroads there are rates in single car lots for distances between 6 to 10 miles of less than $1.00, while for distances between 1 to 5 miles there are rates of $2.00. This same discrepancy applies all the way through. That practically covers the exhibit for the reason that everything else in the exhibit is explained and the tariff references given and the points between which the shipments move are shown.

Q. And these figures were obtained from the tariffs of the carriers involved, on file in your office?

A. Yes sir.

Q. Which are the files of the Department of Public Works of the State of Washington?

A. Yes sir.

Q. Is there any further comment that you wish to make on the exhibit?

A. I think not, everything is given in the exhibit in explanation [fol. 12] of any of the figures that might be asked.

Cross-examination.

Mr. Dudley:

Q. Calling your attention to the item No. 170 on page 6, Snohomish to Everett, 7 miles, $1.95½, that is a commodity rate?

A. Yes sir.

Q. Is there not a distance tariff that reduces that to $1.56½?

A. Not that I know of.

Q. Then turn to the next page, page 7, item No. 100, Reliance to Tacoma, you give the figures there $2.43½, isn't that reversal of figures—isn't that or should not that be $2.34½—that is a typographical error?

A. That is possibly an error; that might be true.

Q. I would say in checking it up here, we find that to be the case, it should be $2.34½ instead of $2.43½; the figures are transposed?

A. Yes, it could be easily figured by increasing by 25% the $1.87½ and that would be $2.34½ that is correct.

Q. So that that should be corrected to read $2.34½?

A. Yes; you will find the same figures on the other pages showing the transposition of those figures.

The Director: Are there any other questions of Mr. Calderhead?

Mr. Mount: I would like to point out one or two errors on page 10; Item 160, Hanna to Cosmopolis, distance shown as 5 miles, should be 8 miles. The next item 160, Hanna to Aberdeen shown as 7 miles should be 11 miles—exact miles 10.8 miles.

A. How about Hanna to Hoquiam, 160?

Q. Item 160 again, Hanna to Preachers Slough, shown as 9 miles, should be 10 miles. The next item 160, Hanna to Hoquiam, should [fol. 13] be 14 miles. The next item is 187, Aberdeen to Primo, distance shown as 14 miles should be 16 miles.

A. Is that due to the short line mileage of your distance tariff?

Q. I am just giving you the actual mileages now?

A. Are those your short line mileages?

Q. No there is only one route there.

A. Any competition?

Q. No, there is no competitive route there at all; there is only one road and the mileage I am giving you is the actual mileage Mr. Calderhead. And the train load rates the first item, Primo to Cosmopolis, shown as 11 miles should be 13. On the same page, page 10 item 185, the first item under heading of train load rates. The second item under that, or the last item on the page, Primo to Aberdeen shown as 14 miles should be 16 miles. On the next page, page 11 Primo to Hoquiam, third item, should be 19 miles instead of 17 miles. That is all.

A. I will have to check those mileages, but I am quite certain that we took it from your distance tables.

Q. That is where I took these. I took them and checked them over three times to be sure.

A. It is possible there is an error there of a mile or two, but I cannot understand how I got it wrong.

Mr. Clifford: In the cases in which you have pointed out an error in the distances is it your contention that there is a corresponding difference in the rates?

Mr. Mount: No, the rates are all right it is the distance. It would increase the mileages and possibly throw out some of those rates shown in Mr. Calderhead's compilation in this statement in this exhibit.

A. It would only throw them out where it occurred either with a nought or a 5, but I would say very few of them would do that.

[fol. 14] Mr. Mount: Yes there would be only a few of them.

The Director: Any other questions of Mr. Calderhead?

Mr. Henderson: Referring to the loose leaf, west and east of the Cascades combined, that shows the average rates—per thousand feet—of the combined east and west tariffs, does it?

A. Yes sir, those are the commodity rates, not distance rates.

Q. Now referring to page "E" of the exhibit, will you be able to get the average rate shown on the loose leaf from exhibit "E?"

A. No, we would not for the reason that exhibit "E" covers both distance tariff and commodity rates.

Q. Another question with reference to page 2, item 125, Oso to Everett 42 miles, will you check that and see whether that is not 28 miles?

A. I am quite certain that is not, but I will check it.

Mr. Irving: This is probably taken through by way of Snohomish, the logs are not hauled that way however.

A. And the 42 miles are through Snohomish. That would be correct. They would go through Delta and over the Great Northern cut off there.

Mr. Dudley: Is this a separate exhibit?

A. No, it goes right in with the original exhibit "A."

Mr. Clifford: Now from your examination of the log rate in the state and your preparation of this exhibit would you say, that the log rates shown are logically constructed and consistent, or the opposite?

A. I would say that the rates are not consistent for similar distances. The tariffs themselves plainly indicate this without any suspicion of them.

Mr. Carey: Can you ascertain from your exhibit what the average log haul is on the four lines?

[fol. 15] A. The average length of the haul?

Q. Yes.

A. That was one of the items which we requested of the carriers, and it has not been supplied to the Commission at this time.

Q. I think that is a very important matter?

A. Our inquiry to the carriers to supply us with certain information of that kind included not the average distances but the actual distances.

Q. From all that you can compute the average length of haul on each of the four lines of railroad?

A. Yes sir.

The Director: The representatives of the Northern Pacific may proceed with their testimony.

Mr. Clifford: That is all Mr. Calderhead.

Mr. Da Ponte: I have here Mr. Calderhead's letter of February 14, 1921 in which certain specific detailed data concerning log traffic is requested for this hearing. I will say that we had to get this from St. Paul, most of it, and I only got the last of it a few days ago, but I have secured everything that the Commission requested and checked it up with his letter. I have only one complete set of the exhibit with me. Some of them were not copied through an oversight but I am having that done today and I will have a large number of copies tomorrow, enough I think to distribute to the interested parties, but I can file today with the Commission in response to this letter, the exhibits prepared, which will give all of the information requested. I don't know that there is anything further that we could add to that until the Commission examines that and satisfies themselves that that is a complete statement. You may then want to ask us for more information or for explanations of it. I will state that these exhibits show, generally speaking, the opera-[fol. 16] tions on the Seattle and Tacoma division, the cost of moving logs, and of the separate items requested by Mr. Calderhead, and the revenue derived. The actual out of pocket cost not including anything for return on the investment or for taxes, but just the net result of the actual operations, both receipts and expenses; and as will appear there it shows that the Northern Pacific Company is conducting that operation at a loss.

Mr. Henderson: We have no objection to that being filed with the Commission but do think that it should not be introduced as an exhibit in the hearing except by some person who compiled it, in order that there may be some cross examination upon it and that we may get some information in that way from the exhibit, but certainly filing a statement of that kind as an exhibit in a hearing is unusual. For the information of the Commission or for the experts of the Commission to enable them to compile statements from it or to file exhibits it might be useful, but to put it right into the record in this manner without the exhibit being verified by some person who can verify it and explain it upon cross examination is unusual, and we think it should not be received as a part of the record for that reason, until we can interrogate some one who made it or who can vouch for it.

Mr. Da Ponte: I am not offering that as an exhibit, I am furnishing that to the Commission as what was requested from us; that is for the Commission to make such use of it as they see fit. I presumed they wanted it for this hearing because the information given in response to these inquiries would show the result of a loss in traffic. That, I take it, is the point of this inquiry and I think it shows that. Now we have not the accounting officers from St. Paul

here to explain some of the things; unless Mr. Calderhead under-
[fol. 17] stands it. We discussed that point among others and it was thought that Mr. Calderhead would understand this exhibit and that he would let us know if there was anything doubtful or uncertain about it, but I think the exhibit had better be examined and then the Commission will know what further is desired or what witness they desire in explanation of it. I was uncertain, I will state frankly as to what was the purpose of this hearing.

Mr. Calderhead: The purpose of asking for the information was in order that we might make up a statement concerning the cost of handling logs. We didn't expect to use the information received as an exhibit in the shape received from the carriers but we couldn't get the information we required to place in the form of an exhibit without first ascertaining and getting these figures from the carriers and being given an opportunity to verify them, if we thought it necessary. I am frank to admit that it would take me some little time to check over these figures and to make up any statement which will be of any material value to the Commission.

Mr. Da Ponte: I didn't know exactly what was expected of us only from this letter, as we had made no complaint. I had supposed that if we complied with what was asked of us that that would be all that was wanted at this time.

Mr. Henderson: It seems to me if the Commission please, that the order of the Commission together with the complaint is very specific in that it says distinctly "That if these rates are challenged the burden will be upon the carrier." Now they have been challenged, both by the loggers and by this Commission, as unreasonable, and this kind of an exhibit will serve us no purpose in so far as placing any burden upon the carrier is concerned, because until they are analyzed and until they are subjected to cross examination in
[fol. 18] order that we may know what items go to make up the cost, it would appear to me to be of no particular service in this hearing, and all that I am interested in is that they should not be received as a part of this record because while I might not challenge them at all, until they are sworn to they have no verity that would stand up in my opinion in the record.

Mr. Balmer: So far as the Great Northern is concerned we prepared an exhibit, detailed, so that anyone who examines it for five minutes can look it over and see what it shows. It may be as Mr. Calderhead says that this exhibit is not in the form that will immediately permit him to prepare from it the exhibit which he seeks to present to the Commission, but this is an exhibit which plainly shows upon its face everything that purports to be included in the totals and in the general figures that are shown. This statement was prepared in response to a request from the Commission, and so far as I am concerned I didn't merely intend to submit it to the Commission for filing, but I intended that it be submitted to the Commission and tended as an exhibit and marked as an exhibit in the case. We have not brought in here any representative of our accounting department from St. Paul who prepared this exhibit. I intended to,

but found on telegraphing that it would be impossible for one of them to come. I assumed that the figures we presented would not be accepted as an exhibit in so far as those figures might seem to be equivocal or uncertain. Now I say that on the face of this statement they don't appear to be equivocal or uncertain, they appear to be definite and certain. If it is going to be contended here and ruled by the Commission that these figures must be verified and subjected to cross examination I think the thing to do at the present time is to postpone this hearing, and if that is going to be done I think we ought to have at the present time from the Commission [fol. 19] a ruling as to upon whom it holds the burden of proof to be, so that we can come down here and not loose so much time as we have already lost in an attempt to show upon whom the burden of proof rests; but we shall present it in response to the request of the Commission.

Mr. Henderson: I want to be thoroughly understood, I'm not in a position to attack these figures because I don't know anything about them but I will undertake to say, that never before this Commission or the Interstate Commerce Commission or any other Commission or Court that I have ever heard of could you present in an informal way an exhibit unless someone verifies it and vouches for it and it is subjected to some cross examination. If this case should go up on review what would the court know of a mere exhibit of that kind unless it was explained or some cross examination upon it, so that we may know what items go to make up the totals. It is certainly irregular, as I view the proposition, to informally put into the record something that is prepared in some office some place. I am not saying they are incorrect because I have an idea what would happen to any carrier that would come before this Commission without having proper figures, but I think it is an irregular way to put in an exhibit, and I certainly object to its going in in this way; but for the information of the Commission, of course, it may be all right. [fol. 20] Mr. Balmer: If you admit these figures are correct and I don't think there is anyone here that will doubt they are correct, the only point to your objection is, that there is something to this exhibit that is not plain—that is that it is not clear upon its face. Now do you feel that you should put the carriers to an expense of that kind, of bringing a witness here from St. Paul for an examination of that sort; don't you think you should look over the exhibit and if it appears clearly that it covers everything it purports to cover shouldn't you then permit it to go into the record without calling upon us to bring a witness from St. Paul?

Mr. Henderson: No, because I might want to bring out from some witness as to what is involved in the cost of operation and until I had a witness to explain it I couldn't put that in the record unless I took a stand myself and that would not be doing justice to explain it that way. It should be explained by the company.

Mr. da Ponte: I take it for granted that Mr. Calderhead will understand the exhibit, and as I have already said, if there was anything that was uncertain or any doubt about it, if you will let

us know, we will have to bring a witness from St. Paul to show it. Now, there is nothing here to show on the record except this request for this information—we were asked to bring in these figures and we have done it and I think they will largely speak for themselves, if Mr. Calderhead will go over them and let us know what he thinks. We are offering them as a true statement of the cost of operation.

Supervisor Spinning: Have you more than one copy Mr. da Ponte?

[fol. 21] Mr. da Ponte: I told you I am having some of them made, I will have six or seven copies here tomorrow.

Mr. Welsh (for the Willapa Harbor Traffic Association, and allied interests): Of course, we will agree with Mr. Henderson that it would not be right to introduce these exhibits or these statements in evidence without their being some foundation laid or some relevancy shown, but I would suggest that for the time being that the shippers, or the roads, file these statements with the Commission and give us an opportunity to examine them. It may be that after we have examined them we will say to ourselves that we understand them thoroughly and that we don't desire any cross-examination, and if we do we can let you know and later on examine someone who can come before us and tell us what we want to know. I don't mean that they can be filed—that they can file them as exhibits in the case, but I mean that they can file them for the information of the Department and I believe that is the solution of the whole situation so that we may get to work on it.

The Director: I will state, Mr. Welsh, that that is the view of the Commission. We will not permit these statements to be filed as exhibits in the case unless they are properly verified and properly supported by testimony. Now it was the intention to have these figures supplied long before the hearing, if possible, so that our traffic experts could check them over and ascertain whether they are correct and from these figures prepare an exhibit of their own. Now we will accept this as an answer to our request for information, but they will not be treated as exhibits unless they are supported by proper testimony.

[fol. 22] Mr. da Ponte: The letter gave the impression that we were supposed to bring these to the hearing at this time. If you will read that letter—that is the impression I had from it. I could not have gotten them here very much sooner, maybe two or three days sooner.

The Director: Have you any further testimony Mr. da Ponte?

Mr. da Ponte: No sir, not at this time. We are not prepared, as I say, to go ahead. We don't consider that the proof is upon us. We are willing to co-operate and do all we can in order to help in the thing. We are offering those figures though.

The Director: Yes. I understand, not as an exhibit but merely for the information for the Commission.

Mr. da Ponte: Well, as showing the results of the transportation of logs in this state.

The Director: You may proceed Mr. Balmer.

Mr. Balmer: In response to the request of the Commission the Great Northern has had prepared by its Accounting Department and now offers in evidence statements as follows: A statement showing intrastate movement of log shipments made within the State of Washington, during the eight months ending August 31, 1920, three months ending November 30, 1920 and one month ending December 31, 1920. I have a copy of this for the Commission. I have three or four copies that I can submit to interested parties.

Mr. Henderson: We have the same objection to that exhibit that we had to the others, that it is not in response to the letter of the Commission. The letter of the Commission was not intended and should be construed as a request to producing such figures at the hearing, and that these exhibits are not properly supported by testi-
[fol. 23] mony.

Mr. Balmer: To avoid making the separate objection to each one I make my offer to all of them. I offer Great Northern statement number two showing number of carloads of logs hauled in the State of Washington by mixed freight trains and log trains for the months of May to December, 1920. I offer in evidence as Great Northern exhibit three, a statement showing freight proportion of operating expenses on the lines of the Great Northern Company in Washington. I offer in evidence Great Northern Company's exhibit four, a statement of total freight train miles, total freight engine miles, total freight car miles loaded and total freight car miles empty, total gross ton miles and total net ton miles segregated for the three western divisions of the Great Northern. I offer in evidence Great Northern Company's exhibit five, a statement showing the gross net ton miles, etc., for the months of September, October and November, 1920. I offer in evidence the Great Northern Company's exhibit number six, statement showing Washington intrastate traffic on logs for the eight months ending August 31, 1920; three months ending November 30, 1920, and one month ending December 31, 1920. This shows the number of cars, logs, the number of tons, the number of ton miles, the revenue, the car miles, the average haul per car, the average load per ton mile, the average revenue per car and the average rate per car mile. I offer in evidence Great Northern Railway Company's exhibit seven, a statement showing the cost of repairs to the logging flats of the Great Northern at the Everett, Washington and Hillyard, Washington shops, for one year, August 1, 1919, to July 31, 1920. This statement also shows the cost of repairs to all freight cars
[fol. 24] on the system of the Great Northern during the same period for comparative purposes. Each one of these exhibits, Mr. Chairman, were prepared and are offered in evidence in compliance with the Commission's letter. The Great Northern Railway Company is not prepared at this time to produce a witness from the operating department to submit to cross-examination with reference to these figures. We submit them as statements which are correct and which plainly show upon their face without any uncertainty and anything that they purport to cover and everything that the Commission has requested and should it be the ruling of the Commission that these statements cannot be received in evidence without the supporting

evidence of a witness from the Accounting Department, we ask either that this hearing be postponed or that it be held open for a sufficient length of time to permit us to bring a witness from St. Paul to submit that evidence or that the case be held open to permit of taking that evidence by deposition.

Mr. Henderson: We offer the same objection.

The Director: The statements will be received on the same basis that the statements of the Northern Pacific were received, for the information of the Commission, to be checked and examined by our rate experts, but unless there is some supporting testimony we cannot receive them as exhibits in the case, but merely as the response to our request for that information.

Mr. Balmer: What is the Commission's ruling with respect to holding the case open to permit bringing the necessary witness?

The Director: We will pass on that when we come to it. We will see how much testimony we can obtain today. I apprehend it is going to be necessary to continue the hearing by the looks of things.

[fol. 25] Mr. Balmer: Now, I have copies of these statements that I have submitted, one to Mr. Henderson and one to counsel for other interested parties, and I would like to make the request of these gentlemen, at this time, that they examine these statements and unless there appears something in them which in their opinion necessitates cross-examination that they waive their objections to their introduction without the necessity of my bringing an accounting witness to verify them.

Mr. Welsh: We will examine these statements as soon as possible and if we can possibly avoid cross-examination we will withdraw our objections.

Mr. Henderson: I will state if we can do without cross-examination we will be glad to do so. We only want to preserve the privilege that they go in properly.

The Director: Any further testimony, Mr. Balmer?

Mr. Balmer: None at this time.

The Director: You may proceed Mr. Dudley.

Mr. Dudley: I desire to offer in evidence first a sketch, which will be no more than an approximation—it is a statement of the valuation of the Milwaukee's properties in this State. It is prepared in the Chicago office and contains this note, "The valuation of this Company's property by the Interstate Commerce Commission is not yet completed; the inventory of physical quantities *quantities* has been made, but it is not yet summarized and a start has not yet been made on the pricing. The company has no reliable information, at the present time, upon which to state the fair value of the railroad property in the State of Washington." I realize that is not a very definite statement, but I think it will be generally conceded that this railroad's property has some valuation. This contains an approximation towards that valuation and we desire to offer that in evidence and ask that it be marked Milwaukee's exhibit number one.

[fol. 26] Mr. Carey: By whom was this valuation compiled?

Mr. Dudley: By the accountant office in Chicago.

Mr. Welsh: We object to that on the same grounds we made. We may later withdraw our objections, but for the time being we object.

Mr. Dudley: I suggest it would cost anywhere from one to five million dollars to identify all of those figures. The Interstate Commerce Commission has already spent several hundred thousand dollars valuing these roads and they are not completed yet and it will be impossible to complete them in time. I submit them to the Commission for such information as they are worth.

The Director: They will be accepted the same as the other matters for the information of the Commission.

Supervisor Cleland: On that point, you don't mean that this Commission or the Interstate Commerce Commission, or any other Commission would require a railroad company to bring a witness to verify every item?

Mr. Dudley: No.

Supervisor Cleland: And you are not trying to leave the impression that we asked any such thing?

Mr. Dudley: No. If the valuation of the Interstate Commerce Commission could have been completed we could have brought their figures. Now this Commission itself in the past years valued the Northern Pacific and the Great Northern but didn't value the Milwaukee.

Supervisor Spinning: Your reference is made to the valuation?

Mr. Dudley: Purely and simply of the property.

Mr. Carey: These figures cover your entire lines?

[fol. 27] Mr. Dudley: In the State of Washington; they are confined to the state of Washington.

Mr. Carey: You haven't $665,000,000.00 in this state?

Mr. Dudley: That includes the State of Washington, but it includes the entire system. I will call Mr. Greengard.

SAMUEL GREENGARD, a witness produced on behalf of the Chicago, Milwaukee & St. Paul Railway Company, after being first fuly sworn, testified as follows:

Direct examination.

Mr. Dudley:

Q. State your name?
A. Samuel Greengard.
Q. And your occupation?
A. Traveling Accountant.
Q. You are employed by the Milwaukee Railroad?
A. Yes sir.
Q. Have you been preparing statistics for this hearing?
A. I have.
Q. Have you a table there of all freight operating statistics for the State of Washington?
A. Yes sir.

Q. That is the comparison of 1919 and 1920?
A. Yes sir.
Q. Will you state how you made up that exhibit?
A. The total operating expenses are taken from the statement of actual expenditures for operating expenses compiled in Chicago for the State of Washington. The net ton miles in a compilation from our Chicago figures in the same way, which we reduced to the cost per net ton miles and per loaded car miles. The revenues are taken [fol. 28] from waybills showing actual receipts and which we reduced to the net ton and loaded car mile basis. The same thing holds true for the year 1920 and with which this compares, 1919-1920. The system freight statistics are on the same basis, except that they are all freights and are not reduced to logging freight statistics.

Mr. Dudley: I desire to offer that exhibit in evidence. I will say that primarily the purpose of that exhibit is to show an increased cost of operation in 1920 over 1919. This hearing was first suggested by the Commission in the fall of 1920 and at that time I started preparing statistics and the statistics which the account's office in Chicago furnished me were based upon 1919 operations, so the figures we will introduce here in the main will be 1919 figures and the purpose of this particular exhibit is to show that we are not giving the shippers any the worst of it. On the contrary the situation was worse for the carrier in 1920 than it was in 1919.

Mr. Henderson: Is this Milwaukee exhibit number two?
Mr. Dudley: Yes.
The Director: Any objection to this?
Mr. Henderson: No objection on our part.
Mr. Welsh: Nor on ours either.
The Director: It will be admitted.

(Marked Milwaukee's exhibit No. 2.)

Mr. Dudley: Have you prepared a statement of all freight and logging traffic operating expenses for the year 1919?
A. Yes.
Q. Have you that statement?
A. I have.
Q. Will you state how that is prepared?
A. This statement is prepared from figures from Chicago that are [fol. 29] compiled in the same way they were on the other one. That is our actual expenditures for the State of Washington. They are the expenditures for all freight traffic. They were reduced by the percentages shown above which are applicable to the logging traffic only. These percentages are arrived at on the ratio that logging bears to all freight traffic.
Q. What ratio did you use and how did you get at the ratio?
A. The ratios are used on the basis of the loaded car miles of logging traffic to loaded car miles of all traffic.
Q. This exhibit consists of four sheets, I believe?
A. Yes sir, they are numbered one to four.

Q. And contain first the item of maintenance of way and structures?

A. Yes sir.

Q. Then the item of maintenance of equipment, that is the various segregated items that go into it?

A. Yes sir, according to the I. C. C. classification of general account traffic and sub-accounts.

Q. And then the transportation—that is on page three?

A. Yes sir.

Q. And then your miscellaneous and general——

A. Yes, and transportation for investment.

Q. The figures shown in red are what?

A. Credits.

Q. I will ask you whether or not this statement is prepared upon the form of accounting by the Interstate Commerce Commission?

A. Yes sir.

Mr. Dudley: We desire to offer this exhibit in evidence.

[fol. 30] Mr. Welsh: No objection as far as we are concerned.

The Director: Any objection to this exhibit: It will be admitted.

Mr. Dudley: Did you prepare a statement in response to Mr. Calderhead's letter or the letter of the Commission?

A. Yes sir.

Q. Have you those there?

A. Yes sir.

Q. How is that sheet headed?

A. The first one is a statement of all freight traffic operating expenses, year 1919, State of Washington, requested by the Public Service Commission of Washington, February 14, 1921.

Mr. Dudley: Now, I think there is one item, if the Commission please, that we were not able to supply. The Commission asked us to distinguish as to that freight moving in exclusive log train or freight trains with other commodities. That distinction we were unable to *mek* from our records.

A. On that question, there is one of those statements that I didn't prepare. I want to qualify my statement a little while ago, that I prepared all the statements requested by the Commission. I prepared all of them except the statement showing actual log movement from point to point, which was prepared by our traffic department. We have a copy of that statement here and I didn't prepare it.

Mr. Calderhead: The Milwaukee don't run any exclusive logging trains?

Mr. Dudley: We do.

The Director: He simply says that he didn't personally prepare that. The rest of them he did.

[fol. 31] Mr. Dudley: Our exclusive log trains have not been segregated from that in mixed trains so as far as that question is concerned we won't be able to furnish the information that the Commission asked for.

Mr. Calderhead: I asked him to repeat the method by which he divided the operating expenses in his first statement, as between logging traffic and other traffic?

A. It is divided on the basis or rather the ratio that logging traffic loaded car miles bears to the total all freight loaded car miles.

Mr. Dudley: The items in this statement which you prepared at the request of the Commission are all embodied and found in that exhibit number three, which we previously offered, are they not?

A. They are all in the other exhibit and the other exhibit of course, embraces more than this.

Q. It gives the details?

A. Everything that is in the statement for the Commission are embodied in the other one in a little different form, but they are all in there.

Mr. Dudley: We will offer this statement in evidence, prepared at the request of the Commission, as exhibit four.

The Director: Any objection?

Mr. Henderson: That is the exhibit headed Statement of All Freight Operating Expenses for the Year 1919?

A. The reference marks on the left margin of the exhibit four have reference to the same reference marks in the letter of Mr. Calderhead's of February 14, 1921.

The Director: It will be admitted as Milwaukee's exhibit number four.

(So marked.)

[fol. 32] Mr. Dudley: You prepared another statement, Mr. Greengard, which is logging revenue and expenses and car and ton mile statistics for the year 1919?

A. Yes sir.

Q. Will you state how that is made up?

A. The basis of these figures are the same as the others that have been previously explained, except that we have shown this in a different form to bring out the direct charges for the train and logging service; that is to say, that what is commonly known as the out of pocket charges. To that we have added the balance of the transportation and maintenance account and have arrived at the total operating expenses; these figures, of course, all being reduced to cost per loaded car mile and to net ton mile. In addition to that we have added taxes, interest on investment and equipment, and interest on investment in road, making the total expense shown at the bottom, reduced to loaded car miles and net ton miles, to compare the costs with the total revenues received, which was arrived at as explained heretofore, and that is reduced to loaded car miles and to net ton miles.

Q. In this statement I notice you have Olympic division, what does that include?

A. The Olympic division is our line from Port Angeles to Sequim.

Q. And east of Port Angeles?
A. Yes to Discovery Junction.
Q. The Peninsular Line?
A. Yes sir.
Q. The National Park Branch, Coast Division?
A. That was formerly known as our Tacoma-Eastern Railroad [fol. 33] from Tacoma to Morton, including a couple of branch lines.
Q. The Bellingham Division?
A. Our Bellingham Divisions runs from Bellingham to Glacier, that is the old Bellingham and Northern Railroad.

Mr. Calderhead: Is there any provision as between Olympic and Bellingham Divisions for transfer by water?
Mr. Dudley: No, I don't think we have had any freight of that kind at all.

Mr. Dudley:

Q. And the Willapa Harbor Branch that covers what line?
A. From Maytown to Raymond.
Q. And the column headed Balance of the State?
A. That is the balance of the lines in Washington that we couldn't segregate as we have the Olympic, National Park, Bellingham and the Willapa Harbor Branch, and it consists of our Enumclaw Branch and some others.
Q. The accounts for those parts of the road are not kept separate?
A. No sir.
Q. But on these other branches they were kept separate?
A. They were kept separately at that time.
Q. That gives you as your total expense per loaded car mile what figure?
A. 66.242 cents.
Q. And your revenue per loaded car mile?
A. 36.526 cents.
Q. And per net ton mile, your cost?
A. 2.4875 of a cent.
Q. And your revenues per net ton mile?
[fol. 34] A. 1.3715 of a cent.

Mr. Dudley: We desire to offer this in evidence as Milwaukee's exhibit number five.
The Director: Any objection: It will be admitted.

(Marked Milwaukee's exhibit number five.)

Q. Those items of expense, Mr. Greengard—where did you get the item for repair of logging cars?
A. They were taken from a special study made by our general manager, who had a force of men go through the labor and material reports at Tacoma and for other points, showing the actual cost of repairing logging cars.
Q. Were those all the tabulations which you prepared?
A. In connection with the Commission's letter of February 14,

1921, they also asked for the total expenditures and maintenance of way and structures, and in addition to that the total expenditures chargeable to maintenance of way and structures less accounts 278 and 279, which are maintaining joint tracks and other facilities, depots, etc. We have prepared that in a statement headed "A Statement of All Freight Operating Expenses for the Year 1919, State of Washington," requested by the Public Service Commission February 14, 1921.

Q. They asked you to exclude certain expenses, did they not?

A. Account- 278 and 279, Interstate Commerce Commission accounts.

Q. You excluded those and then show the total after deducting them?

A. Yes sir.

Mr. Dudley: We will offer that in evidence and ask that it be [fol. 35] marked Milwaukee's exhibit number 4-1, so as to form a part of the other exhibit?

The Director: Any objection? It will be admitted.

(Exhibit marked Milwaukee's exhibit number 4-1.)

Cross-examination:

Mr. Henderson: Referring to exhibit three will you state how you made your division between freight and passenger?

A. There is no passenger, we didn't consider the passenger. This is just freight.

Q. Did you keep a segregated cost of freight and passenger?

A. Yes sir.

Q. How did you segregate that by individual accounts?

A. Those are segregated except certain items which have to be prorated and those are shown as they go into the accounts.

Q. And these items of freight include those items as you prorated them, do they?

A. They include the freight proportion.

Q. Now what items did you prorate?

A. Well, common items like superintendence and general office expense, that is divided between freight and passenger.

Q. And how did you prorate your maintenance and structures between freight and passengers?

A. Well, that is divided on the same basis, on the basis of gross tonnage per ton miles. That is done monthly.

Q. And that is the way you prorate your general overhead expense?

A. Yes sir.

Q. And these items here which are under the column "Balance State All Freight" includes these prorated items do they?

[fol. 36] A. That is the freight's proportion.

Q. Well, how did you apportion them, on the net ton or the gross ton basis?

A. Those figures were taken from the actual charges that make up

freight proportion, they are taken from Chicago figures. Those were already prorated, we didn't do that.

Q. Then you don't know how the prorating is done?

A. Except in a general way, that is all.

Q. Could you give us any items showing how the maint-*ainence* of way, of the ties and rails, and all these various items in here are prorated, as between freight and passenger?

A. They are prorated on the ton mileage basis.

Q. Gross or net?

A. I believe it is gross ton. I am not quite certain about that.

Q. Now referring to exhibit four, at the bottom of the exhibit you have these words, "Cost per Loaded Car Mile All Freight." Item under total is .03637 what does that mean?

A. That is cents, three and a fraction cents.

Q. Three and a fraction cents is the cost per loaded car mile?

A. That is all freight.

Q. Does that include all expenses for freight?

A. That includes all expenses for freight as shown on this sheet.

Q. Well, you have shown all the expenses on this sheet, have you?

Mr. Dudley: May I explain that to the Commission?

Mr. Henderson: Anybody who can.

[fol. 37] Mr. Dudley: I will simply say that that sheet was prepared in response to the Commission's inquiry. Every item on that sheeet is shown in the exhibit, but there are some things in exhibit three that don't appear on that sheet. Threfore it don't shown all the costs, but that shows all the costs which appears in response to the Commission's' inquiry.

Mr. Henderson: Well, what costs are properly included that are not shown on exhibit four?

A. Well, the expenses that are chargeable in the I. C. C. classification, that is only part of it.

Q. Then that total cost per loaded car mile on exhibit four doesn't mean anything, does it?

A. It is the average cost as requested by the Commission.

Q. Then that cost on exhibit four is the cost which the Commission directed you to include in the costs?

A. Yes sir.

Q. And the costs on exhibit three is the costs that you yourself included irrespective of what the Commission requested?

A. We included all expenses in that, yes.

Q. Now, I notice that you have some repairs in one of these exhibits on that exhibit four, freight trains, car repairs and cost of repairs to logging cars. The total is $206,339.58—is that correct—cost of repairs to logging cars exhibit four total?

Supervisor Cleland: Is that item 4-E?

Mr. Henderson: Item 314. How are any of those repairs paid by the shippers?

A. No, those are expenditures that are paid by the railway company.

[fol. 38] Q. Well, if they are paid initially by the railroad company do they charge any of those repairs to the shipper?

A. No sir.

Q. None of them?

A. None of them.

Q. Any of the repairs that you charge to the shipper?

A. We charge them direct. These are made up for a year ago. That is for a year previous, so by that time all of these rebuilt cars have been credited back through other accounts. It represents the amount actually paid out by the company, net.

Q. The net amount?

A. Yes sir.

Mr. Henderson: If the Commission please, will this witness be available tomorrow after we have looked over these exhibits? We would like to preserve the privilege of further cross-examination.

Mr. Dudley: Yes, he will be available.

Q. Taking exhibit number two Mr. Greengard, I notice you have your total operating expenses, freight revenue, and other items for 1919?

A. That is all system?

Q. That is all freight operating statistics for the State of Washington the very first segregation; have you those same segregations for 1920?

A. The total operating expenses?

Q. Yes, total freight revenue, net ton miles and loaded car miles?

A. We don't have it in the same form so that that would be comparable in that way.

[fol. 39] Q. Have you any figures in any of these exhibits that are comparable to any of these figures?

A. They are in the other statements.

Q. In what statements do you find comparable figures?

A. Statements number five and number three.

Q. Why couldn't you give them as they are here in exhibit number two, why couldn't you make the figures for 1920 segregated as they are in 1919?

A. For the reason that in 1919 we operated what is now known as our National Park Line, which was then known as the Tacoma-Eastern, our Willapa Harbor Branch, which was then known as the Willapa Harbor Railway, the Bellingham-Northern, which was then known as the Bellingham and Northern, now the Bellingham Division, and our Olympic Branch, which was then known as the Port Angeles and Western—they were operated in 1919 as separate subsidiary companies, since then they have been consolidated with the Milwaukee System and we don't keep a segregation of the various accounts.

Supervisor Cleland: In that connection, under the year 1920, the

exhibit two—does the Coast Division and the Olympic Division and the Bellingham Division mean the same as it does in 1919?

A. It does for those particular items.

Q. I should think the headings should run the other way. They appear to be wrong.

A. We have the balance of the state in 1920; we have the Coast Division, which includes the Willapa Harbor. Our Coast Division don't extend over into the Eastern Washington, so that the segregation was a little different in 1920.

[fol. 40] Supervisor Cleland: Well, the segregation for the Olympic and Bellingham Divisions are the same?

A. The Coast Division includes the Willapa Harbor Branch. We had that separated from the others in the previous hearing.

Q. Wherever you use this heading in 1919 you run them across on to 1920?

Mr. Carey: Did you have anything to do with the preparation of this property investment statement?

A. That was made in Chicago. The only thing I had to do with it was the reduction of the total investment in load equipment to that proportion which pertains to the logging traffic, so we applied the same percentages to that as we did——

Q. This first item here, total property investment $665,000.00 represents the investment in the entire system?

Mr. Dudley: I think that is correct Mr. Carey.

Mr. Carey: Then you divide that by the total number of miles in the entire system, is that the idea?

Mr. Dudley: I will modify that; I think that probably represents the value of the system without those separate branches. I am not certain about that.

Mr. Carey: That is what I am trying to find out.

A. This is reduced to a mileage basis in the State of Washington.

Mr. Carey: So that the lines in the State of Washington prorated on the mileage basis leaves a value of nearly $60,000,000?

A. Yes, according to that.

Q. But the actual investment of the lines in the State of Washington is somewhat less than $60,000,000.00? Well, then this total of $59,000,000 odd dollars which is the prorated value in the State of Washington, does or does it not include these four items of book [fol. 41] value or does it cover some property—so that this $15,800,000 of book value on these five branches represent property that is also included in the prorated value of something under $60,000,000.00——

A. I would say that it does. I didn't prepare that statement.

Mr. Dudley: If it is satisfactory to you and the Commission Mr. Carey, I will communicate with the Chicago office and ask an explanation of that. I don't know myself.

Mr. Carey: But this total property investment was $665,000,000, that would include all your terminals in Chicago and Milwaukee?

A. I would not be prepared to say anything about that.

Q. Apparently part of that is prorated to the State of Washington?

A. It seems to be that, but I would not say one way or the other.

Q. You had a statement there, if I understood you correctly, in which you had the entire operating expenses in the State of Washington and then segregated as between logging traffic and other traffic?

A. Yes sir.

Q. Let me see that please?

A. That is exhibit three.

Q. I am referring now to exhibit three, the first column, as I understand it, is the total freight operating costs in the State of Washington?

[fol. 42] A. The first column is all the freight expenses for the balance of the state.

Q. What do you mean by the balance of the state?

A. We have separated the Olympic and Bellingham and the other divisions and that represents the balance.

Q. In other words that would include all your branches, except the branches which you have specifically enumerated?

A. Exactly.

Q. And then upon that part of your system the logging traffic is 3.90% of all your freight traffic?

A. Yes.

Q. And then over on the Olympic Branch your logging traffic is 53.48% of all of your freight traffic on that branch?

A. Yes sir.

Q. And then on the Tacoma-Eastern your logging traffic is 59.19% of all your traffic on that branch?

A. Yes sir.

Q. And then on the Bellingham Northern your logging traffic is 63.36% of all of your traffic on that branch.

A. Yes sir.

Q. And then on the Willapa Harbor Branch your logging traffic is 25.29% of all of your traffic on that branch?

A. Yes sir.

[fol. 43] Q. Now in computing the figures in the first column which is the total freight traffic expense, on all your system except these branches that you have specifically tabulated, you have included all of the expense chargeable to freight?

A. Yes sir.

Q. That would include a portion of the maintenance of all of the terminals as enumerated by the various accounts on the four sheets?

A. Yes sir.

Q. And for instance, you have rather extensive yards in Seattle?

A. Yes sir.

Q. And the expense of operating those yards would be included in that first column?

A. Well those are all specifically set out by the accounts; from the name of the accounts you can tell exactly what they cover.

Q. Well, the second item here headed equipment, that would include the expense of maintenance on main and branch lines and also any expense of maintaining your Seattle yard?

A. You mean roadway maintenance?

Q. Yes.

A. There would not be any charge against the Seattle yards.

Q. Where would the expense of maintaining the Seattle yards be?

A. In the track account.

Q. Doesn't the track account go into the roadway maintenance?

A. No, the roadway maintenance is an account for keeping the track open etc. You would have to go into an exhaustive study of the I. C. C. accounts in order to explain each item.

[fol. 44] Q. Well for instance, where would the expense of the ordinary section crew be charged, under what sub-classification?

A. Under account 220, of ties and rails and etc.

Q. Well, all of those charges would be included in some one of these sub-accounts?

A. Yes sir.

Mr. Dudley: Do you mean all in one item?

Mr. Carey: No they would appear somewhere in these different accounts.

Mr. Dudley: Yes.

Q. Now that would likewise be true of your wages for switching crews, and switchmen and yard men and yard engine crews etc.?

A. Yes sir.

Q. But as a matter of fact a very small portion of your logging traffic would pass through the Seattle Terminals?

Mr. Dudley: I will object to that as not cross examination. The witness is not supposed to be familiar with that. I will put a witness on whom you may examine.

Mr. Carey: These figures are presented here for anything they may show.

Mr. Dudley: This is a question of operating practice which you are asking about. We will put a witness on and you can question him about it.

The Director: Answer the question if you can answer it.

A. What was the last question?

Q. I say a very — proportion of your logging traffic will pass through the Seattle Terminals?

A. I am not prepared to say what proportion of the logging traffic will pass through the Seattle Terminals.

Q. Well without knowing what proportion of the logging traffic would pass through the Seattle Terminals you would not be able to [fol. 45] draw any conclusion from this statement as to just what these figures show with reference to the actual cost of transporting logs?

A. Well, except that it is certainly fair that the cost of the log traffic should take a proportion of all accounts. For instance, you might say that grain does not take its proportion of this account, and lumber does not take its proportion of this account etc. Why certainly the logging traffic has to bear its proportion of the overhead expense as well as any other commodity.

Q. But if you had a large grain elevator in the Seattle Terminal which was devoted exclusively to the handling of grain you would not expect part of the cost of maintaining that to be charged to logs?

A. It is not.

Q. But by using this percentage which you did use of 3.9% in the second column you do charge part of that up to logging?

A. We would if we followed that all the way through, but you will notice on the statement there is a charge there for grain elevators which is one of the I. C. C. accounts 237, there is no charge opposite it. You will find several other accounts there too that there is nothing against for logging traffic.

Q. Well take for instance your switch engine in the Seattle Terminals that would be all charged in here somewhere?

A. I don't know why you picked out the Seattle Terminals, for instance there is other terminals where they do actual logging business. We probably don't get all of the actual cost that go to make that up, for instance Tacoma; we probably spend more there than we get in that segregation of these costs.

Q. I am simply using Seattle as an illustration. You probably handle more logs in your Tacoma Terminals than in your Seattle Terminals?

A. I imagine we do. That is an operating matter.

[fol. 46] Q. A percentage that might be entirely fair as to the Tacoma Terminal would be entirely unfair as to the Seattle Terminal?

A. I am not familiar enough with the operating conditions to be able to state.

Q. Have you any statement prepared that shows the actual cost, so far as is ascertainable, of transporting logs?

A. If we had it we would not have to resort to this.

Q. Well that is what I wanted to find out.

Supervisor Cleland: I notice there are four items on there for which no charge has been made against—of 210, elevators and structures; 237 grain elevators; 251 power plants, dams, canals etc. and 267 underground conduits. Have you any such items for which a charge could be made to any account?

A. Well there are on the Milwaukee system, yes.

Q. In the State of Washington?

A. Well I don't know as to that.

Mr. Dudley: Which items are those?

Supervisior Cleland: Elevator structures, grain elevators——

A. There are some in the State of Washington that I know of,

and I think—well I don't know about grain elevators, I hardly think so.

Mr. Carey: Now there are a large part of your operating expenses incurred on account of logging that can be distinctly allocated to the logging business?

A. Well like repairs to the cars, we can do it at a considerable expense by making a study of it; that is going back and picking out the time slips for car repairers and material reports, but in railroad accounts we don't segregate them.

Q. And you could actually definitely ascertain for instance the train crew's wages on logging operations?

[fol. 47] A. Not except we went to work and made a special study for one week or one month or something like that, by segregating it and taking all the logging time slips from the other time slips.

Q. It could be done that way, in the way that you have mentioned?

A. For how long a time, a few days?

Q. Well for a representative time, a week or ten days?

A. Well, an estimate on ten days may or may not be representative.

Q. But it would be more representative than lumping in of all of your freight charges and then assuming that an arbitrary percentage?

A. I don't think so.

Q. It is just a matter of opinion?

A. No, I think this is the fairest way we could arrive at it, to get any particular commodity rate.

Q. Is there anything in any of your exhibits that would show the average length of the log haul on your line west of the Cascades?

A. I think our traffic department has worked up some figures on that.

Mr. Dudley: I will introduce that by another witness.

Mr. Carey: I think you said you had some statement there, a special study that was made in the managers office concerning the cost of repairing log cars?

A. That will be explained by the man who made it.

Q. Where logs move in solid train loads there is no difficulty about ascertaining the actual wage costs for train operation?

A. Well if it was an isolated operation such as on a branch line where they don't do any other business but logging, possibly we could do it then, but we have no such operation.

[fol. 48] Q. But you actually operate, or do you operate any exclusive log trains?

A. Yes we operate exclusive log trains.

Q. For instance you could ascertain the cost of the engineer's wages?

A. Yes sir.

Q. And the cost of the brakemen's wages on log trains?

A. Yes sir.

Q. And all other wages that are definitely separable?
A. Yes sir.
Q. But that has not been done you say?
A. We don't keep it that way in any of our accounts.

Mr. Dudley: It has been done to some extent. We will introduce that by other witnesses. I will furnish you some studies of that question.

Mr. Welsh: No I understand that you have another witness that you are going to put on who is familiar with the operating department?

Mr. Dudley: We have two or three of them.

Mr. Welsh: We reserve our right to cross examine this witness at some future time.

Mr. Henderson: Will this witness be able to give us any idea of the logging equipment which the Milwaukee has in the State of Washington?

Mr. Dudley: I don't know, we have a witness here who can, whether this witness can or not.

The Director: Any further questions at this time?

Supervisor Cleland: Wouldn't a fair way be to pro rate the expense of the logging operations, to take all expenses including the terminals—all of the items excluded under the I. C. C. classification, and divide them according to the passenger and freight business and then divide all freight between logging and other operations?

[fol. 49] A. I don't see the advantage. We have already one division here, why go back and lump it and then divide it again?

Q. Well isn't that what you have done?

A. No, the ordinary railroad method of accounting primarily separates between the freight and passenger business, and we took in the amount already charged to freight and made the separation between freight and passenger and logging; in other words, picked the logs out.

Q. That is what I suggested. Someone has already divided between freight and passenger and you have divided between logs and other freight.

A. Yes sir.

Q. Why did you leave out any items?

A. Because there was no charges to it in that year.

Q. All the items then carried in your exhibit 3, where there is no such charge made, there is no such expense in the State of Washington?

A. No sir, not for that year. You will notice in connection with that also that we have given the statement credit for investment in road equipment. You understand what that account covers, so we have given you every possible benefit and advantage in showing the cost. You will notice on sheet four of Exhibit No. 3 that there is quite a large credit under transportation for investment, we might have left that out and possibly tried to cover it up, but we didn't.

Mr. Calderhead: That transportation for investment account, the

details of that are explained in the classification of accounts by the Interstate Commerce Commission?

A. As well as all other accounts. Of course that is generally understood I think.

[fol. 50] Mr. Henderson: Take Milwaukee Exhibit No. 1, the total property investment, Tacoma, I would like Mr. Dudley, to know if that includes operating as well as non-operating property or does it include non-operating property as well as operating property?

Mr. Dudley: I don't know of any non-operating property that the Milwaukee has. It only includes the operating property. I would say as I said a while ago, that I was uncertain whether the 59,000,000 shown for Washington was included in the $665,000,000 for the entire valuation. On examining the exhibit I see that it is included. There was an explanatory note on the exhibit which I see I overlooked. The $665,000,000, odd, includes the total operating property. Then there is $59,000,000 in the State of Washington. Then the valuation of the separate branches is given. Below there is an explanatory note that they are included in the $59,000,000 so it will not be necessary for me to send to Chicago for that additional information.

The Director: Before proceeding any further with the exhibit, I will state that upon looking up the order of the Commission in Cause No. 5092—that was the general 25% increase, these statements are made. At this hearing, representatives of the shippers of the various commodities, particularly lumber, logs, grain and grain products, appeared before the Commission and urged special consideration of their particular interests, but on the whole this Commission concurs in the views of the Interstate Commerce Commission, that a fair disposition will be attained by applying the general increase with the distinct understanding that this action is without prejudice to any future findings or order of this Commission. With particular reference to objections urged upon the part of the logging industry, it is our opinion that the present rates are illogically constructed and not in harmony in different communities, and that unless carriers immediately proceed *arrange to* a modification of such [fol. 51] rates, the Commission will upon its own motion, require a readjustment of same, but for the reasons above stated, will permit the percentage increase authorized by the Interstate Commerce Commission to apply upon the log rates in this state." And the concluding paragraph of our order contains this statement "The authorization for said general increase is not and shall not be construed as a finding by the Commission that such increase is reasonable or nondiscriminatory, and in event that any rate so increased is hereafter attacked on any ground, the burdon of proof shall be upon the carrier affected to justify the rate challenged, in the same manner as if such carrier were making application for the increase." In view of the statements made in our findings and the portion of the order which I have read we will hold that the burden of proof to justify the existing log rates is upon the carriers.

Mr. Balmer: In that connection I would like to submit this sug-

gestion. It is true that your order in the general advance rate case following the decision of the Interstate Commerce Commission in the General Rate Case stated that in any future proceedings the burden would be upon the carriers to justify the reasonableness of the Intrastate rate which was then advanced, nevertheless it seems to me certain, in view of the decisions recently of the Interstate Commerce Commission in cases that are now pending before the Supreme Court of the United States that to that extent the qualification upon the order of the Interstate 25% advance rate decision was nugratory. Following the decisions of the Supreme Court of the United States in the Shreveport Minnesota Rate Case, the Interstate Commerce Commission has recently held in 4 or 5 cases which arose in North Dakota, Illinois, New York and one of the Southern States, where the Commissions of those states had refused to advance Intrastate rates to the same level as the Interstate rates were advanced [fol. 52] in the same territory, that the failure of the state authorities to advance the intrastate rates in exactly the same proportion as the interstate rates necessarily operated as a discrimination against interstate commerce. Now your order in the state case did not advance intrastate rates but if they are subject to the qualification that assumes to place the burden of proof upon the carriers to justify that level of rates which the Interstate Commerce Commission has found not only reasonable and just but necessary, then it seems to me that your order in the intrastate 25% advance rate case and the ruling that you have just announced, is contrary to the Transportation Act. I feel that the carriers are entitled to come into this hearing with the presumption upon all the rates—with your advance and with the Interstate Commerce Commission advance in the 25% rate case—that the level of the rates to which you then advanced the intrastate rates was reasonable and just and that not in this hearing or in any other hearing do the carriers labor under the disadvantage of justifying those rates. The burden of proving them unreasonable rests upon the party attacking them.

Mr. da Ponte: I want to preserve an exception to that ruling. The statement in the 25% advance rate case, was not an order which was reviewable, and therefore if it was in excess of the Commission's authority to decide all the issues in that case, which I think it was, therefore it would be nugratory, and we reserve an exception to the Commissioner's ruling as to the burden of proof. Now that is a complete surprise to us and we are not prepared to meet it and didn't come prepared but we will probably proceed, and reserve an exception to the Commission's ruling. It may not be material in the ultimate disposition of the case. I think the order of proof cuts no figure, but the question of the burden, that is as to what the evidence shows, may become—but we will proceed in the order which the Commission indicates, but without prejudice to our rights to pre- [fol. 53] serve an exception to the Commission's ruling as to the burden, but we are not prepared to proceed today. We can be prepared but I would have to have witnesses from St. Paul, then we could go ahead.

The Director: We tried very hard to induce the carriers to establish by testimony independent of the record that was introduced before the Interstate Commerce Commission their right to have the rates increased as to intrastate traffic. They didn't do so. They submitted only the record before the Interstate Commerce Commission. It was largely for that reason that we made this statement in our order, since it has been called to our attention, and we feel that it should be the duty of the carriers to justify any specific rates that were increased by virtue of that order when they are attacked for any reason, and we will adhere to our ruling. Of course the exception will have to be allowed.

Mr. Dudley: We will ask an exception to this proceeding. We don't think this hearing calls for any burden of proof. The notice doesn't call for any such thing. It is an investigation as to what shall be a fair and reasonable rate, and we're prepared to go ahead today and aid the Commission to the very best of our ability and we are willing to do so, but we except to any burden of proof.

Mr. da Ponte: Now if the Commission will set a later date at which we can proceed——

The Director: I presume it will probably — necessary to continue the hearing——

Mr. Robbins: For the purpose of preserving the record we desire an exception on behalf of the Oregon-Washington Railroad & Navigation Company.

Mr. Balmer: I have not made my exception yet although I talked longer than other of the gentlemen so I would like to enter my exception.

[fol. 54] The Director: We will have the record show that each of the carriers excepts to the ruling, while I don't think that will be necessary in a Commission proceeding, I think you would be entitled to attack it anyway.

Supervisor Cleland: Now there has been none of those cases decided by the Supreme Court of the United States, Mr. Balmer?

Mr. Balmer: No, but Mr. Cleland, in the Shreveport Rate Case, which is undoubtedly the foundation of the Transportation Act, the Supreme Court of the United States said: "It is manifest that the state cannot fix the relation of the carrier's interstate and intrastate charges without directly interfering with the former, unless it simply follows the standard set by federal authority."

Supervisor Cleland: We are familiar with that case but there has been no case decided by the Supreme Court of the United States touching or upon that question since the passage of the Transportation Act.

Mr. Balmer: No.

Mr. da Ponte: Is it the purpose of the Commission in this hearing as a result of the record that is made up here to fix reasonable and compensatory rates on logs, is that the purpose of the inquiry?

The Director: Yes to fix just and reasonable rates on logs.

Mr. da Ponte: Whether they may be up or down?

The Director: Yes. In other words, it is to readjust and estab-

lish just and proper rates on logs. In our order we stated that we expected the carriers to take the initiative in that and proceed with the necessary readjustments, and the carriers didn't see fit to do so, and complaints became so general that the Commission entered the complaint of its own motion.

Mr. Henderson: May I say in answer to the argument of counsel for the railroads that they didn't have any idea that they were going to meet this issue, that paragraph 6 of the complaint filed by the [fol. 55] Commission specifically charges that these rates are unreasonable. Now the order that the Commission made was not reviewed, and my recollection was that the decision of the Supreme Court is, that all orders and all parts of orders are reviewable, and the Commission stated that if the rates were attacked the burden of proof would be upon the carriers; and the rates were challenged, in this paragraph the Commission challenges the sufficiency of the rates, so I don't see why the carriers are not ready to meet the issue.

Mr. da Ponte: That refers distinctly to some inequalities in the rates and the question of trainload rates and special commodity rates were what the Commission were going to investigate. Now there is language broad enough as Mr. Henderson suggests to include the inquiry which we understand is to be entered upon, but I didn't so understand it.

The Director: I announced, Mr. da Ponte, at the very beginning of the hearing, that the purpose of this hearing was to——

Mr. da Ponte: Today you mean?

The Director: Yes.

Mr. da Ponte: Yes, I understand it today, but I didn't come prepared——

The Director: We supposed our complaint sufficiently announced it at the time it was served.

Mr. da Ponte: Well perhaps it did, I merely explained as to the negotiations that occurred prior to that time, but we can be prepared at the next hearing and will do so. There are a good many things—we can go ahead tomorrow, if we are given an opportunity later to prove those figures which we have already filed.

The Director: I think it will be best to take all the testimony that both sides have ready to present.

Mr. da Ponte: Well we have enough to run a day or two.

The Director: Then if further time is needed we will take it up.

[fol. 56] CHARLES B. INGALLS, a witness produced on behalf of the Chicago, Milwaukee and St. Paul Railway Company, after being first duly sworn, testified as follows:

Direct examination.

Mr. Dudley:

Q. Please state your name?
A. Charles B. Ingalls.

Q. And your occupation?
A. Accountant.
Q. You are working for the Milwaukee Railroad?
A. Yes sir.
Q. Have you made any investigation as to cost of repairing log cars and log flats?
A. Yes sir, I did.
Q. When did you make that investigation and what was the character of it?
A. The investigation was started the first of October and continued to November 30th.
Q. The first of October 1920?
A. Yes sir.
Q. And what did it cover?
A. It covered the repairs to logging flats, both material and labor.
Q. During what period?
A. During the 6 months period in 1919, from April 1st to September 30th inclusive.
Q. 1919 you say?
A. Yes sir, 1919.
Q. And just tell us how you got at those figures?
A. The figures for the Tacoma shops were all there at Tacoma, and were worked up at Tacoma. The outside points including Bellingham, including the Bellingham and Northern and the Olympic Division and the St. Malries branch in Idaho were all shipped in to Tacoma and the figures worked up from the statistics sent in.
[fol. 57] Q. Have you prepared a tabulated statement showing the result of that investigation?
A. Yes sir.
Q. Have you that in your hand?
A. Yes sir.
Mr. Dudley: Mark that Milwaukee's Exhibit No. 6. Now I notice you give there your tabulated statement in the first column the average number of cars in service per month at the various points—Raymond, Bellingham, Port Angeles, and all stations, where did you get those figures?
A. Those figures were taken from statements prepared by Mr. Brown.
Q. And he is the Car Superintendent?
A. Yes sir.
Q. And their total net cost figures——
A. Are taken from the detail sheets prepared by our crew at Tacoma.
Q. That is in the master mechanic's office?
A. No, we had a private car at Tacoma.
Q. Then your average cost per car per month is simply a question of division from the other two columns?
A. Yes sir.
Q. And your average cost per day is another division?
A. Yes sir.
Q. What division do you use, 26 days?

A. 30 days, a month.

Q. The average loaded car miles per car for the 6 months period, where did you get those figures?

A. We got those figures—they were received from the same place where the average number of cars per month were received.

[fol. 58] Q. And the average cost per loaded car mile?

A. That is divided into the total net cost.

Mr. Dudley: We desire to offer this statement in evidence as Milwaukee's Exhibit No. 6.

The Director: Any objection—it will be admitted.

(Admitted and marked Milwaukee's No. 6.)

Cross-examination:

Mr. Henderson: Can you tell whether the greatest damage is done to the car in loading or unloading, or whether it is in the line haul?

A. I am not prepared to state.

Q. Did you prepare this Exhibit No. 6, yourself?

A. I was assisted by three other clerks.

Q. It was under your direct supervision?

A. Yes sir, it was under my direct supervision.

Q. Now can you explain why the charge or the cost at Tacoma is so much greater than it is at Everett?

A. Well for the reason that the cars that are damaged in the service at both Everett and Cedar Falls are usually sent to Tacoma for heavy repairs.

Q. They are sent to Tacoma for heavy repairs?

A. Yes.

Q. Now at Everett and Cedar Falls the loggers do their own unloading and have their own dump ground, don't they?

A. I am not prepared to state.

Q. Well if that is true that would account for some of it?

Mr. Dudley: Objected to as argumentative, and this witness is testifying as an accountant.

Mr. Henderson: Well then I will ask him on a hypothetical question, if that is true that at Everett or Cedar Falls the loggers have their own dumping grounds the difference in the cost would be probably accounted for by that fact, wouldn't it?

[fol. 59] A. I would not want to state on that because the only information that I have is, that cars that are damaged either on the Everett Branch or the Cedar Falls, on account of the force or otherwise, the cars are sent to Tacoma for heavy repairs because they have more facilities there for handling the work.

Q. And you would charge them up at Tacoma, the Everett cars?

A. Well the work is actually done at Tacoma and charged into the Tacoma account.

Q. And everything that is done at Tacoma is charged into the Tacoma accounts?

A. Yes.

Q. Whether it comes from Everett or any place else?

Mr. Hayden: That simply means that the main part of the repair work is done there?

A. Yes sir.

Mr. Henderson: Now I believe you stated you couldn't tell whether the greatest amount of damage was done in loading or unloading or whether it was done by the railroad haul?

A. Yes, that is what I said.

Q. Do you know whether or not the damage done to the cars in loading and unloading is charged to the shippers?

A. I am not prepared to say.

Q. You don't know about that?

A. No.

Q. Now with reference to the average number of cars in service per month, have you any figures that would show the corresponding tonnage that these cars hauled in the months accounted for in Exhibit 6 that you have in your hand? What I want to find out is, the tonnage hauled on these cars as compared with the same tonnage hauled on some other kind of a car—a box car for instance, during the same period?

[fol. 60] A. No sir. I have no such figures.

Q. Do you know of any place where you could get such figures?

A. They probably would have them in the accounting department at Chicago.

Mr. Henderson: Do you know Mr. Dudley?

Mr. Dudley: I don't know. We don't haul logs in box cars.

Mr. Henderson: I know you don't but I want to get the average repair bill and compare them.

Mr. Dudley: We will be able to show you the business done. While I have not the statement in full here I am going to ask permission of the Commission to introduce it later, a tabulation showing the number of logs hauled in a year, that is, subsequent to April 1919, from each station, and the miles hauled, the destination and the point of origin, coupled with the rates etc. That will give you the figures you want as to the number of cars used at any station.

Mr. Henderson: What I am getting at is, this Exhibit 6 shows a very large cost per loaded car mile for repairs.

Mr. Dudley: Yes.

Mr. Henderson: And I wanted to get some comparison with reference to the cost of repairs to other cars in so far as the revenue produced by that car is concerned, and the revenue produced by this car——

Mr. Dudley: Yes I think you can get it, not accurately, but in this way. Our annual reports show the cost of maintenance of freight cars etc. and taking that and dividing that we would have the number of cars and dividing that up will get the average.

Mr. Henderson: What I had in mind was, it might be very prob-

able that repairs on these cars were hgher than repairs on cars of other description.

Mr. Dudley: Two or three times as high.

Mr. Henderson: So it might also be possible that the revenue produced by these cars by reason of their being continuously in serv-[fol. 61] ice—that the revenue might be higher?

Mr. Dudley: I think that I can answer that question, it won't be.

Mr. Henderson: I think it will.

Mr. Dudley: The revenue produced on this does not bring back the expenditure for operating costs, leaving out repairs.

Mr. Henderson: That is your operating costs that you charge there?

Mr. Dudley: Yes, according to the I. C. C. Rules.

Mr. Carey: What is your official position with the Milwaukee Road, you said an accountant either at Tacoma or Seattle?

A. Seattle.

Q. So you are testifying only from an accountant's stand-point as to what the figures show?

A. Yes.

Q. And you know nothing about the operation side of the figures?

A. No sir.

Q. Now for instance, take this first item, 458 cars repaired at Tacoma, you would not know how many of those cars were ordinary flat cars assigned to the logging service and how many of them were especially equipped for logging service?

A. No, but I could find out, the series of the cars would show that.

Q. Do you know whether or not the Milwaukee operates any special logging trucks, or is all of their logging done with flat cars?

A. I could not say as to that.

Q. And the same thing I have assumed is true with the other items?

A. Yes sir.

[fol. 62] Q. If any considerable portion of these cars are ordinary flat cars you would not know what the expense of repairing these -lat cars assigned to the logging business was in comparison to similar cars devoted to other classes of service?

A. I would not.

Mr. Welsh: You are an accountant, are you?

A. Yes sir.

Q. What experience have you had as an accountant?

A. Well, not a great deal—that is as a certified accountant.

Q. Have you had any experience in the preparation of the Interstate Commerce reports?

A. No sir.

Q. You are not familiar with that at all?

A. No sir.

Q. Are you aware that in the Interstate Commerce Reports under the items begin-ing about 98 and ending with about 106 that there

is a formula for figuring the cost of repairing fraight cars—an item given as that?

A. There is I believe such a figure.

Q. Now, did you use the same formula for computing the repairs to these cars in question as is used for computing the repairs in the Interstate Commerce Commission's report?

A. I don't believe that the Interstate Commerce Commission—I would say that the repairs, both material and labor were followed out as our records show them on the face of it.

Q. But as to whether or not the same method is used you don't know?

A. No.

Supervisor Spinning: I would like an explanation of the extraordinary expense of repairing cars from Spirit Lake, it is something like three times as much as any other station; individual cars $2.72 [fol. 63] as against $2.936 at Tacoma average cost per day per car?

A. That is on account of the low number of average cars in service per month.

Q. I am unable to understand that answer?

A. You see at Spirit Lake we only have there an average number of cars in service there is 25 as against we will say at Tacoma 458—yes we have 4,000 as against 778 at Tacoma.

Q. Your appliances at Spirit Lake are probably not as good?

A. That is probably so.

Supervisor Cleland: I thought you said they brought all the heavy repairs to Tacoma and it cost more to make a repair there than it did any place else?

A. Well you see they have to haul it something like 300 or 400 miles to bring it to Tacoma.

Q. If that is true it would mean that all of the spirit Lake cars are damaged about 4 times as much as they are at Tacoma. You said all of the worst cases were brought to Tacoma from the Western Division and that must mean that the repairs at Spirit Lake are extraordinary, about 3 times as much as the worst case brought to Tacoma?

Mr. Dudley: No the heaviest costs are Cedar Falls and Tacoma.

Supervisor Spinning: What reason do you give then Mr. Dudley, for the extraordinary cost for repairing cars at Spirit Lake?

Mr. Dudley: In the first place heavy repairs are done at that shop and in the next place owing to the method of logging in Idaho the cost or repairs are heavier than they are in Washington. In Idaho the logs are all chained and the question of furnishing chains comes in there and makes quite a little difference?

[fol. 64] A. The detail sheets will show that, that the chains were the highest part of the repairs at St. Maries.

Supervisor Cleland: Chains are carried as a part of the flat car or logging car equipment?

Mr. Dudley: Yes.

Mr. Calderhead: What are those, logging trucks?

Mr. Dudley: No flats, I think; I think we have no trucks in use.

I don't think we have any but if there are it is an inheritance from the old P. & E.

The Director: Any further questions of this witness?

(No response.)

The Director: Call your next witness.

Mr. Dudley: We will call Mr. Kellogg.

[fol. 65] O. P. KELLOGG, a witness produced on behalf of the Chicago, Milwaukee & St. Paul Railway, after being first duly sworn, testified as follows:

Direct examination:

Mr. Dudley: Please state your name?

A. O. P. Kellogg.

Q. What is your occupation in connection with the Milwaukee?

A. Chief Clerk Traffic Department of the Chicago, Milwaukee & St. Paul Railway.

Q. Did you prepare an exhibit showing the logging operations in the State of Washington for the year 1919?

A. I have prepared a statement in line with the Washington Commission's request showing point to point movement of log operations in the State of Washington. The request covers the year but the figures we had were for the last nine months, and in order to complete the year the additional data was secured by taking the average and completing the year by adding one-third to the figures we already had.

Q. That is you had nine months of 1919 actual figures and you added one-third for the three months?

A. Yes sir, that is as shown by the exhibit—explained at the top of page two of the exhibit.

Mr. Henderson: Is this the exhibit marked "Recapitulation?"

A. Yes.

Mr. Dudley:

Q. That exhibit consists of how many sheets, Mr. Kellogg?

A. Five sheets including the recapitulation sheet at the beginning.

[fol. 66] Q. That covers from the month of April to December, 1919?

A. Yes sir.

Q. And that shows the miles hauled, the number of car moved each month from each station, the rates, the approximate revenues, the net ton miles and the loaded ton miles?

A. Yes sir, and I will also say that the exhibit was divided as were the other exhibits, showing the various branch lines and there is then shown the corresponding figures for the balance of the state, and in-

cluded also is the Washington portion of the interstate haul, where that interstate haul involves movement within the State of Washington.

Q. You got these statistics from what place?

A. These figures were obtained from our transportation department, who keep an actual record of all of the log movement. The earnings were based on the actual rate in 1919, using the minimum scale as a basis for determining the earnings. For instance if the minimum was 7,000 feet per car that was the minimum used in determining the basis per car.

Q. So that your total revenue is short to the extent that any car was loaded over the minimum?

A. That is it.

Q. In other words, in making the first revenue figures it is figured simply on the minimum basis. Why was that Mr. Kellogg?

A. We didn't have the actual figures and in order to arrive at these approximate revenues we used the minimum scale.

Q. That minimum is what?

A. In many cases 7,000 feet.

Mr. Henderson. In many cases?

A. Well, practically all. Mr. Calderhead's exhibit will show the minimum.

[fol. 67] Mr. Dudley: We will offer that exhibit in evidence?

The Director: Any objection to that? (No response.) It will be admitted.

(Marked Milwaukee's exhibit No. 7.)

Cross-examination:

Mr. Clifford: Mr Kellogg, I believe you stated that in case a movement included in your showing of revenues was an interstate movement that you made a division between intrastate and interstate revenue, how did you accomplish that?

A. By dividing it on the mileage, using a mileage basis.

Mr. Dudley: There is one other question, I notice you have a column here of the net ton miles, how did you get at that?

A. The net ton mile basis was used by using a weight of 8.21 as the pounds per foot of logs. In other words, we had weighed 147 cars of logs at various points on the coast and the average of those weights, that is the footage of the logs produced an average of 8.21 pounds per foot, and that basis was used in arriving at the net ton mile figures shown in this exhibit.

Mr. Henderson: In order to get an understanding, is the revenue shown here in this exhibit seven short the amount that was received over and above the minimum?

A. Yes sir. For instance, if a car actually a carried 8,000 feet and the minimum was 7,000 feet we charged 7,000 feet, not knowing what the actual scaling contents of that particular car was. The record from which this information was obtained was a point to point

movement of the number of cars, and didn't show anything at all as to the contents, and we in arriving at that figure could only obtain the minimum basis.

Q. Would the shipper however have to pay you the full amount that the car scaled?

[fol. 68] A. If it was properly scaled.

Q. That is he should have?

Mr. Hayden: This does not indicate at all that he didn't pay it?

A. No sir.

Mr. Henderson: Then if you received a revenue from 7,000 feet, and if it were a haul that had a 6,000 foot minimum you would apply this revenue here to a 6,000 pound minimum?

A. Correct.

Q. And if the average was far above 7,000 feet your showing on this exhibit would be just that much short wouldn't it?

A. Yes, the earnings would, of course, be that much more in proportion.

Q. So this is based upon the assumption that the cars were only loaded to the minimum?

A. Correct.

Q. And if the shipper didn't load to the minimum he paid the minimum anyhow?

A. He did.

Q. So that in so far as any cars are loaded over the minimum this report is short that much for the entire state movement?

A. Yes sir.

Q. Do you know anything about whether or not the majority of the cars are loaded above the minimum?

A. I don't know as to the majority of the cars, no. I will freely admit a number of the cars are loaded over the minimum, but of course, there is a number that is loaded under, but the fellow that loads under pays for the minimum, the same as the fellow that loads over pays for the difference.

[fol. 69] Q. Have you any figures to indicate what that overloading would be?

Mr. Dudley: I might say, Mr. Henderson, that by my next witness I will prove this, that that was the scale and that the average as shown from 147 cars was 7,126 feet, as an average carload. That will appear upon another exhibit.

Mr. Henderson: Now, for the months of January, February and March your estimated revenues would be one-third of the balance of the month?

A. Of the balance of the year, yes.

Q. Isn't there any way that you could get accurate figures?

A. I presume there was, but you will understand that we have been working on this logging proposition for some time. These figures we had for the nine months in 1919 were made up for about three months in 1920, but in order to bring the exhibit within the desires of the Washington Commission we made it for the year

1919 and took the estimate of one-third, assuming that it was fair to everybody.

Q. Now with reference to this exhibit, does it show any movement here where the minimum was 6,000 or do you use 7,000 all the way through?

A. No, no, we took the actual state movement. We didn't pick out any particular movement but took the movement that was actually performed.

Q. I know, but in picking that movement did you apply the 6,000 movement on those movements that took 6,000 and those that took 7,000, or did you just call it 7,000.

A. We took the actual movement that applied to the rate governing the movement.

[fol. 70] Q. Your Tacoma-Eastern Branch is nearly all 6,000 minimum, isn't it?

A. Well, I think there are some over 6,000.

Q. That is one of your average logging branches, isn't it?

A. Yes.

Q. Will this witness be available hereafter?

Mr. Dudley: Yes.

Mr. Henderson: He will be here tomorrow or at such time as we may desire to examine him?

Mr. Dudley: Yes.

Mr. Calderhead: While Mr. Henderson is on that question and so that it will go into the record, you could easily have accurately ascertained the number of feet on each car by taking the received abstract at these two points or at the two destinations?

A. It could have been but I think there would have been quite a lot of labor involved in it.

Q. There would have simply been each movement, adding up the total number of cars of logs and the total would give you the footage?

A. It would have been quite a large amount of work but it could have been obtained.

Mr. Welsh: You say you weighed some logs, what logs did you weigh, do you know?

Mr. Dudley: I will put that in by another witness.

Mr. Carey: I understood you to say you had some haul there that you divided into state and interstate?

A. Yes.

[fol. 71] Q. Those are over in Eastern Washington?

A. Yes, between Idaho and Washington.

Q. And how important is that as compared with any other log business in the state?

A. That is very small.

Q. Your log movement from the summit of the Cascades westward is entirely within the State of Washington—no interstate haul at all?

A. No.

Q. Now which of your branches proportionately handles the heavies- log traffic?

A. This exhibit will indicate that.

Q. I have not seen it—I beg your pardon I think I have your total on here.

A. The National Park Branch, formerly known as the Tacoma-Eastern shows up as the heaviest.

Q. Now have you any figures showing the average length of the log haul on the Tacoma-Eastern Branch?

A. No, we have no such figures—not today.

Q. Well, could that be made available without too great effort?

A. I expect to have an exhibit showing that tomorrow.

Mr. Dudley: That is the exhibit I expect to recall this witness to explain—we have not had a chance to check it up yet.

Mr. Carey: Have you any exhibits or any means of making an exhibit from which you can determine the amount of logs that are hauled in under the log rates on which you afterwards derive a revenue in the way of revenue on manufactured products.

[fol. 72] A. Our log tariffs provides that the rates are published with the understanding that the outbound movement of lumber will be by the Milwaukee. I presume that is followed up, and we receive an equivalent outbound tonnage off-setting the amount of inbound logs.

Q. And you have prepared a statement showing your log earnings, have you?

A. I might add a little more to that statement that unquestionably would be followed up as to outbound tonnage, but I would rather doubt our receiving the actual outbound tonnage on logs handled to tidewater, because there might be harbor movement.

Q. There the mill might beat the road——

A. If it is looked at in that way.

Q. But the log movement to the inland mills would represent an equivalent amount of manufactured lumber, shipped out?

A. Yes.

Q. So you could easily ascertain the average revenue derived, not only from the inbound movement, but also from the outbound lumber movement?

Mr. Dudley: We object to this—that there is any connection between the log and lumber movement; the United States Supreme Court having held that each of these movements has to bear its own burden.

Mr. Carey: You have prepared no data along that line?

A. Absolutely not; as Mr. Dudley stated, we considered there was nothing in common between the movement of lumber and logs as far as this hearing was concerned.

[fol. 73] Mr. Carey: If the Commission however, should take another view, that these figures should be made available?

A. Right on that point I might say that practically all of your

movement of lumber would be interstate movement. I question its connection with the state movement of logs.

Q. But I say if the Commission, even out of excessive cur-osity, for instance, might think that there was some connection, the figures could be made available?

A. We would be very pleased to do anything we possibly could within reason for this Commission.

Q. Can you say now Mr. Kellogg what proportion of your log movement goes to inland mills and what proportion to tidewater mills?

A. No, I could not.

Q. Would you have any way of computing that?

A. I could by making an analysis of the statement.

Mr. Dudley: That statement gives the point of destination as well as the point of origin—on that exhibit.

Mr Carey: That might not be computed?

A. It could as to the actual movement in this particular case.

Q. For instance, there might be logs billed to some mill at Tacoma, that wouldn't actually go into the tidewater?

A. This is the actual movement and shows the actual movement of logs on the Tacoma-Eastern into Tacoma.

Q. Well, all shipments to a Tacoma mill wouldn't necessarily mean a tidewater mill?

A. Well, any shipments to Tacoma would be available to the harbor mills whether it would be put into the water or not.

[fol. 74] Mr. Dudley: Your rates apply regardless of whether you get the lumber haul or not, do they not?

A. Absolutely.

Q. And you have not means of determining, at competitive points, where the mill is served by more than a single carrier, or at tidewater points, whether you get the haul of the manufacture products or not?

A. Not of these particular logs, no sir.

Mr. Henderson: Your rates read that way do they not—your tariffs read on condition of your getting the manufactured products—they read that way, don't they?

A. Our tariffs, referred to in Mr. Calderhead's rule reads that way.

Q. And then you mean to say that portion is left off——

A. Not that portion of it—you refer to me personally?

Q. No, I mean the Milwaukee?

A. Well, I believe there has been some doubt expressed as to the legality of a rule of that kind.

Q. You are carrying it in your tariffs though?

A. Yes.

Mr. Dudley: You have no separate tariff rates applying where you don't get the manufactured haul, have you?

A. There is just one in connection with one set of rates where an additional rate is charged where the outbound product is not moved.

Q. In one case, what case is that?

A. For instance, we have rates on logs between points in Idaho and Fernwood and Tyson Creek Spur, to Coeur d'Alene—nothing like that in Washington.

[fol. 75] Q. You have no such tariff in Washington?

A. No sir.

Mr. Henderson: Your tariffs are based though on the proposition of your getting the outbound haul isn't it, in the tariff itself?

A. I believe it is freely admitted by carriers that the reason our rates today are so unreasonably low is that they were established with the idea of encouraging the lumber business and the production of additional revenue for the carriers.

Q. That is the reason for the original establishment of the rates?

A. I believe that is one of the reasons. There are other reasons why log rates today are on an unreasonably low basis.

Q. In order to build up the lumber industry and to provide revenue for the carriers?

A. That is one reason.

Mr. Carey: You are getting the full 25% increase on the transcontinental haul?

A. But as you are well aware, rates on lumber have been reduced, and of course that increase has been cut down.

Q. Because otherwise you would have killed the traffic and had nothing to haul?

A. That may have been one of the reasons for the reduction, but the reduction was passed on by the executives—well I am not in a position to say what all of the reasons were.

Mr. Ingalls (recalled).

Mr. Dudley: I would like to ask Mr. Ingalls one question—these figures that you show for car repairs would include the rebuilding of cars as well as ordinary repairs?

[fol. 76] A. Yes sir.

Mr. Henderson: Looking at your exhibit number six, you have the average number of cars in service per month and the average loaded car miles per month, can you tell me from that exhibit how far a car moved in a day—a loaded car?

Mr. Dudley: I think the exhibit speaks for itself.

A. No, not from this statement, but from the detailed statement from which this statement was worked up it could be easily determined.

Mr. Henderson: You could not determine it from that sheet?

A. Not very closely.

Q. Can you determine it pretty accurately—within about a half mile? Does this exhibit six include repairs to all flat cars used for logs as well as lumber?

A. The statement shows only cars used in the logging service.

Mr. Hayden: Do you mean to say that these flats are not used for lumber purposes at all, just for logging?

A. These cars were equipped with logging bunks.

Q. Don't that statement include any others not so equipped?

A. No sir.

Q. Then in regard to the table showing cost of repairing flats that are not equipped with log bunks?

A. Well, those have logging chains. I presume the cars are also equipped with bunks.

Q. But there are lots of the log flats that are not especially equipped, they use stakes upon them—the ordinary flat car with]fol. 77[the stakes that the logger puts on himself, isn't that right?

A. No, I don't believe that is true. These cars in the logging service are all in service and only the cars in this service are used.

Q. Well, then take the National Park Branch, do I understand you to state positively that the flats that are used for logging purposes are not used for lumber or wood, is that true?

A. I could not state positively. Whereas these repairs that are compiled here are cars, that are in the series of logging flats.

Q. Then all the cars in that table are used exclusively for logging purposes and any repairs that are made on any other cars are not included?

A. Not included in this statement as far as it is physically possible to avoid it.

Mr. L. C. Murray: I would like to ask, if it did happen that logging cars that were not equipped with the so-called patent bunks or with the ordinary bunks, and they happened to have a carload of lumber or wood shipped on it, if that car was damaged in service would that car be charged against the logging account or against the lumber or wood account?

A. I would have no way of telling whether it was loaded with wood or lumber as long as it was in that series it would be charged with logging——

Mr. Hayden: Isn't it a fact that your testimony is predicated only on your knowledge that if this car appears on your books in a certain series that this car is used for logs?

A. It is on our books as logging trucks.

[fol. 78] Q. If it is used for lumber or wood, you would not know that, would you?

A. I said that I would not have any way of telling whether it was loaded with wood or logs. However, if the cars appeared in the series of log flats as they appear in our records I would take the repair slip——

Mr. Murray: In other words, if that car was a logging flat and was used for hauling wood or lumber and was still in that series it would be charged to logging if it was hauling lumber—if it was damaged in that series?

A. It would.

Mr. Henderson: There were no unusual wrecks or anything of that kind?

A. Not that I know of.

Q. This was a representative period?
A. Yes, six months of 1919.
Mr. Hayden: During the period of so-called slack period in the movement of logs isn't it true, particularly on the Tacoma-Eastern Branch, that th Tacoma-Eastern flats, designated by you as log flats are used for all purposes indiscriminately?
A. I am not prepared to say.
Q. You don't know?
A. No sir.

Mr. J. J. Dickson:

Q. You stated a few minutes ago that the cars which you showed the total repairs of were used exclusively in the logging service and were simply those cars which were equipped with logging bunks and equipment?
A. Yes.
Q. Do you know the proportion of the log car equipment on the Tacoma-Eastern Branch of the C. M. & St. Paul Railway, are so equipped?
[fol. 79] A. No sir, I am not in a position to state.
Q. Then how do you know from your records which cars are equipped with log bunk equipment and those which are not?
A. Well, they would be in a separate series from those.
Q. Is that true? Are they in a separate series?
A. That is my understanding of it, yes.
Q. Can you tell us which series numbers are equipped with log bunk equipment and which are not?
A. I could not offhand.
Q. Then how do you know?
A. I had the series when these records were compiled.
Q. Could you furnish us with that series?
A. Yes.
Q. One more question I wish to ask, you stated that these cars that you had the statement of repairs on, were used exclusively in logging service. Do you reaffirm that?
A. Yes.
Q. Are you aware that when logging equipment is taken out on the Tacoma-Eastern that when some of the mills need the lumber for shipment to Tacoma that these cars are distributed to the mills for lumber? Are you aware that when the logging equipment is taken out on the Tacoma-Eastern and someone wishes to ship poles or piling on it that those cars are allocated to that purpose? Are you aware that in many cases that when logging equipment goes out on the Tacoma-Eastern that if there is not much demand for it in the logging service that these cars are allocated to the mills for wood?
A. I am not aware of it, no sir.
Mr. Hayden: You don't know about that?
A. No sir, I am not in a position to state.
Mr. Welsh: As I understand it Mr. Ingalls when everything is said and done you have no definite information of your own as to

[fol. 80] what these cars were used for, you were furnished a list of these cars which were supposed to be used exclusively for the logging service?

A. No sir.

Q. But so far as you know they may have been devoted to the fruit service?

A. No, I know they were not; they were supposed to be devoted exclusively to the logging service.

Q. As far as that goes you don't know?

A. I know that these figures on this statement were compiled from lists furnished me of cars that were then in active logging service.

Q. Supposedly in active logging service?

A. Yes.

Mr. Murray: Do you know then that Tacoma-Eastern log flats have carried lumber as far east as Montana?

A. I could not say.

G. L. Brown, of the Cowlitz, Chehalis & Cascade Railroad:

Q. I am also connected with the lumber business and have been for many years, and I would like to ask these gentlemen in their observation of cars loaded with lumber and wood how often do they break up the cars or damage them?

Mr. Hayden: How are you asking now? How are you talking? Are you a witness now?

Mr. Brown: I am making a statement. My observation has been——

Mr. Welsh: I would like to rise to a point of order. I think Mr. Brown should take the stand if he wants to testify.

Mr. Brown: My experience as to the damaging of cars——

[fol. 81] The Director: A little later on you can take the stand and make any statement along that line that you desire to.

The Director: Any further questions of Mr. Ingalls?

(No response.)

The Director: You are excused Mr. Ingalls.

F. C. Dow, a witness produced on behalf of the Chicago, Milwaukee & St. Paul Railway Company, after being first duly sworn, testified as follows:

Direct examination.

Mr. Dudley:

Q. Please state your name and official position?

A. F. C. Dow, superintendent of the Milwaukee Railway.

Q. Of the Coast Division?

A. Yes sir.

Q. Headquarters at Tacoma?

A. Yes.

Q. That includes the old Tacoma-Eastern, the Willapa Harbor, the Everett Branch——

A. Everything.

Q. Except the Bellingham and Northern and the Port Angeles Division?

A. Yes.

Q. Now what do you know about the routing and assignment of cars to the log service and the use of them for lumber?

A. Ordinarily our assignment of log flats does not allow the loading of log flats with anything except logs. There are exceptional cases where lumbermen will get hold of log flats and load them with lumber, if he is pretty hard up, and there are exceptional cases [fol. 82] when the logging business is very poor and other flats are scarce that they have loaded them with wood, but the percentage is very low, as to the total mileage of the car.

Q. What is the comparative effect on cars loaded with logs or lumber or wood, what is the comparative damage to the cars?

A. I am not prepared to give any figures on that but I don't recall a case of a car coming in with wood being sent to the rip tracks, where there is probably ten cars that come in with logs loaded on them that would have to go to the rip tracks for repairs. Wood or lumber is of so much lighter nature that the damage is not nearly as much as with logs.

Q. From your experience, which has been so general, I will ask you whether the handling of logs is not the most injurious to the cars of any other freight you handle?

A. Yes, any other commercial service.

Mr. Hayden: Some of the flats that are included in that list as logging flats have gone east, haven't they, on freight service, as far as Montana?

A. Not if I found it out. I don't know of any case. No doubt once in awhile one will get away but—a fellow loading lumber and wants a car gets desperate and if it goes by us in the night——

Q. In times of car shortage you try to use the car where there is the greatest demand for it, to fill the order?

A. We don't take the log flats out of the log service.

Q. Even though there is a tremendous demand?

A. I am not aware of it——

Q. But in times of great demand and stress for cars for lumber [fol. 83] purposes you furnish any car that will perform that service?

A. Yes, if it is not needed in the log service we would.

Q. If it did happen to get injured, as sometimes happens, it would be sent ordinarily to Tacoma for repairs in that case and the repairs would be included in that table?

A. Yes, but I would like to qualify that by saying that the mileage that the car would make in the lumber service as compared to the mileage made in the logging service would be so small that it

would not affect a general statement, which is what I presume the Commission wants as to the cost of repairs.

Q. It would affect it somewhat to the extent that it got into the table that was not allocated to anything except logs—in these statements that have been furnished?

A. Well, there would be some mileage which would be charged to lumber, but it would be very small.

Q. You don't know how much?

A. No, but I could say that one log flat in a hundred makes a trip with something besides logs. I think that would be a fair average.

Q. Have you ever figured it out or have you any way of figuring it?

A. I presume we could get something like that by going to the accounting records, but it would be a lot of work for all the information of value which I think would be had by such a statement.

Mr. Welsh: How many log flats did you have on the Milwaukee division in 1920?

[fol. 84] A. What do you mean, of the division on which I am superintendent?

Q. Yes?

A. Well, we would average about 1,050. Now that sometimes decreases and increases, probably a hundred or so either way.

Q. Now in your division *fo* do you have charge of cars other than logging cars?

A. Yes, I have charge of all cars.

Q. Of all freight car movement?

A. Yes.

Q. How many flat cars other than those equipped with logging bunks do you have under your supervision?

A. I could not tell you that. We were pretty short of flats at that time—not many.

Q. And you had a number of box cars?

A. Lot of them.

Q. Now in keeping a record of the repair and upkeep of those cars, do you keep a separate record of the cost of repairing and upkeeping of the cars equipped with bunks as compared with those not so equipped?

A. Allow me to correct an impression that I believe has been given out here. You spoke of a car equipped with a bunk—do you mean steel bunk?

Q. Call it a logging car then?

A. Now we call all logging flats bunks whether they are wood or steel.

Q. I know that.

A. Now with that information I probably could answer that ques-[fol. 85] tion, if I understand what you mean. Now I have picked out a logging flat that has a steel or wooden bunk on or an iron bunk—what we call it—there is one n each end to take care of the log; now we would have a record of that entire repair; in fact our

logging department has kept records of each individual car and can tell you what it would cost to repair it.

Q. They don't keep a record showing the cost of repairing log cars as distinguished from an ordinary flat?

A. We do, because we keep a record of the logging cars on this division. I don't believe that with exception of one or two classes of cars—any class that stays on one location long enough so that anybody could keep a record and tell how much it costs for repairs, for the reason that it goes all over the roads——

Q. Where is that record kept?

A. In our log car repairs——

Q. Where?

A. In Tacoma.

Q. That record now is accessible?

A. I have not seen it personally, but I believe they have it.

Q. Now then the record for repair and maintenance of cars, other than logging cars, that is kept separately?

A. No that is kept at every place where they repair a car.

Q. Now are those accessible?

A. Yes sir, the Interstate Commerce Commission requires it—requires us to keep them. They keep a record of every car they repair and the amount of material.

Q. Can you furnish us with an exhibit showing the cost of repair [fol. 86] and maintenance of logging cars and the cost of maintenance and repair of box cars and flat cars other than logging cars?

A. I don't believe we could give you anything but the logging cars.

Q. Now one other question. What is the average daily movement of a logging car in mileage?

A. Well offhand I would say about—really I cannot give you an intelligent answer that would do you any good.

Q. Have you any record of it, where you could produce it later on?

A. Yes, we have those records.

Q. What is the average daily movements of box or flat cars other than logging cars?

A. Well, they go about ten miles per day at the present time.

Q. As a matter of fact you think a logging car would average about a half a mile?

A. It would according to how business is. It is run for about thirty miles per day when business is good and on some divisions it runs about a hundred miles per day, but in the loading territory the car mileage is always low.

Q. When you spoke of repairs you spoke of keeping a record of repairs to cars—it really means the maintenance of cars—that really includes depreciation on the cars?

A. Well, if a maintenance charge will take care of depreciation, that is true.

Mr. Henderson: You said you had, in the divisions over which you are superintendent, some 1,050 logging cars in the service?

[fol. 87] A. About that, approximately.

Q. And where would the repairing be done for your division, in Tacoma?

A. Not all of it.

Q. Where else?

A. At Raymond, at Hoquiam, Independence, Hillsdale, Tacoma, Cedar Falls, Seattle, Everett, and a small percentage out on the lines; that is while in service——

Q. Then there are many other places where repairs are made besides those places mentioned on the Chicago, Milwaukee's exhibit number six?

A. Yes, other small places on the line where they do road repairs.

Q. Do you understand from that exhibit six that that would just refer to heavy repairing?

A. No, I would not, it might include some heavy repairing at Everett, Cedar Falls and Tacoma, and that no doubt includes a great many light repairs.

Q. What repairs do you charge to the shippers?

A. If we can prove that a logger willfully damages a car we bill him for it and try to get the money out of him.

Q. And if the damage happened while it is in your possession you charge him, don't you; that is, if it is taken up on your line and put on to his line, don't you charge it up to him?

A. We do charge it up to him if we can prove it.

Q. You have collected quite a large amount during 1919 from these shippers for repairs of log flats, haven't you?

A. I don't know.

[fol. 88] Q. Do you have a great deal of trouble in collecting these accounts from these loggers for repairs?

A. We submit a bill to our accounting department in Tacoma and they do the collecting. Sometimes they ask us to assist them, but we don't do the collecting.

Q. Well, from your experience do you find a good many cases that you do charge where they pay—But on the average they pay pretty promptly for cars damaged while they have them in their possession?

A. Where they admit the responsibility they pay promptly?

Q. Now on your division do you do most of the unloading?

A. Of logs?

Q. Yes.

A. We own the cars while the loggers unload them.

Q. And if they are damaged in unloading you charge it up to the loggers too, don't you?

A. Not unless he has caused the damage to the cars.

Q. Well, if they are damaged in unloading you consider that he is responsible for the damage done from unloading, don't you?

A. Not in all cases. There might be something happen to the car while it was being unloaded that the logger would not be to blame for.

Q. That would be in connection with the switching or something of that kind?

A. Yes sir.

Q. But the logger loads all the cars?

A. Yes sir.

Q. And incidentally most of the damage is done to these cars in [fol. 89] the loading and unloading?

A. I would say in the loading.

Q. The only case of loading is done while the care is in the possession of the shipper?

A. Yes sir.

Q. And he is responsible for the damage done while it is in his possession?

A. I believe they try to make them believe that.

Q. And you charge it to him if the damage is done while it is in his possession, do you not?

A. If we can prove it, we charge it.

Q. Well, if it was in his possession when it was damaged you will charge it on the books, whether you collect it or not, don't you?

A. Yes, if I find it out and know it.

Q. Now, the damage that is done after you get the car is not much greater to a logging flat than to any other kind of a flat, is it?

A. In cases where we have accidents, or the logs shift on the car or unload or damage the car——

Q. Well, I mean disregarding now the loading and unloading just the transporting of the car and the damage to the log flats in that service is not greatly in excess of the damage to the lumber flats?

A. Yes, I believe it is.

Q. If the lumber shifts, would you get the same damage as if the logs shifts, wouldn't you?

A. Lumber don't have a chance to shift like logs.

[fol. 90] Q. Now do you know of any particular instances where you have had any damage to cars just by transporting them?

A. I could not recall any particular cases.

Q. So that except for some unusual thing, such as a wreck, there would be no particular damage to a car while in your possession?

A. Yes, that is true, if the car is properly loaded.

Q. And isn't it the business of the railroad company to have some supervision of the way the car is loaded, or don't they inspect it before they take hold of it?

A. We do make what would be termed a reasonable inspection. I might explain that by saying that if a logger loads ten or twelve cars of logs and brought them down to our connection in the evening and brough- them down to our train—the conductor goes along and looks them over, but it is often possible, we must admit, there may be lots of defects that might exist that he did not discover.

Q. Do you recall in your experience of any damage to your cars or railway by reason of faulty loading?

A. Yes, there has been considerable of it, but I could not tell you of any particular case right offhand.

Q. You have not had any of the Tacoma-Eastern in the last year, have you?

A. I don't recall any.

Q. Could you recall any instance within the last year where you had damage to the equipment or damage to your right of way or any of your structures by reason of faulty loading of cars?

A. Yes.

[fol. 91] Q. Where?

A. On our Everett line.

Q. In the last year?

A. Yes.

Q. By reason of faulty loading?

A. That would be my judgment.

Q. Did you ever charge the shipper with damage caused by reason of faulty loading?

A. No sir.

Q. Not even if you could prove it?

A. I don't believe we ever even tried it.

Q. Can you think of any further cases where you had damage to cars by reason of faulty loading?

A. There has probably been a half dozen or dozen cases in the last year on the Everett line, caused by what I would term faulty loading.

Q. Have you also not had damage to automobile cars and other cars to the extent of say a dozen times in the last year by reason of faulty loading?

A. I would not say so. It would damage the automobile before the car. The log is stronger than the car is and if there is any damage the weaker member gets it.

Q. Of course, there is no ends or sides to a log car and the only damage that could happen to it, it would cut off the trucks?

A. It is usually caused by uneven loading and the load not properly secured and it breaks a sill and it causes the wheels of the truck to bind so that the car cannot curve and it unloads off the rail.

[fol. 92] Q. Doesn't that happen to lumber also?

A. Not so often as logs.

Q. But it does happen to lumber and particularly on long lumber?

A. Yes.

Mr. Carey: Do I understand that you have superintendence of all of the Milwaukee's lines west of the Cascades?

A. Except on two lines, detached lines.

Q. You have jurisdiction over all the rest, that would be 90% of your mileage?

A. Yes.

Q. Then this figure of 1,050 flats that is the number of flats assigned to the logging service in your jurisdiction?

A. Yes.

Q. Now what proportion of those flats would be the ordinary flat car and what proportion would be equipped for the logging service?

A. All of them are.

Q. All of them are especially equipped with some kind of log bunks, either wood or steel?

A. Yes.

Q. What is the function, why do you use them?

A. That is to take the weight and put it over the part of the car where it is not so strong. If you didn't do that all the weight would be in the center of the car and if you got a crooked log all the weight would be in the center.

Q. The function is to center the weight immediately over the trucks?

A. And distribute it on all the sills.

[fol. 93] Q. Are these bunks, or any of them, also designed to facilitate the unloading?

A. Yes.

Q. So they serve the two purposes, of safeguarding the car and also of facilitating the loading or unloading, as the case may be?

A. Yes.

Q. Some of those cars have wooden bunks and some steel bunks?

A. Yes.

Q. In what proportion?

A. About fifty-fifty—I say that offhand.

Q. Well, I just want it approximately. What is the present expense—when I say present I mean take over a reasonable period, not any one particular minute of course, but what is the extra expense in equipping an ordinary flat car with wooden bunks?

A. I could not give you those figures.

Q. Have you any idea at all?

A. No, I don't. The wood bunk don't cost much. There is nothing but two 8 x 10's put across to protect the sills and the steel bunks, that varies, of course—according to the evidence.

Q. But I presume that the wooden bunks have to be renewed frequently?

A. Yes, and then you have to make stakes for the cars.

Q. Have you any idea which is the most economical, the wooden bunks or the steel?

[fol. 94] A. My idea is that the steel bunks are the most economical, that is if they are made right.

Q. Now, these steel bunks, themselves have some sort of an arrangement to assist in the unloading of the logs?

A. They have what we call a lug that comes up and locks and holds the log on, and if you want to unload you thrown the trip and it unloads automatically and throws the log off.

Q. So that it is very much to the advantage of the carrier to have the flat cars with the steel bunks?

A. Yes, it saves us the expense of cutting stakes.

Q. Would you have this information as to the extra expense of equipping a flat with the wooden and steel bunks?

A. I think I can get it for you tonight, or someone belonging to our organization.

Q. Will you get that in the morning, say?
A. Yes.

Mr. Henderson: On the Milwaukee, Mr. Dow, the loggers have been paying for their own bunks, haven't they?

A. I think previous to the time that I took charge of this division there was an arrangement with one logging company whereby they paid for a portion of the equipment or under a contract of some kind. I am not familiar with that. It may not have existed and I may not have understood it. I don't know of any other case, except where a logger buys his own cars. We have a few that own their own log cars.

Mr. Carey: Wouldn't this arrangement whereby the logger owns part of his cars prove unsatisfactory to both the logger and the railroad company?

[fol. 95] A. As I say I don't know of any trouble about it.
Q. I understand very frequently a logger would equip say ten cars, and then could not have the use of them?

Mr. Murray: Isn't it true that on the Milwaukee the shippers are paying in the neighborhood of seven or eight cents per thousand in addition to the regular published tariffs for cars furnished with the bunks?
A. There is some additional charge made for the movement of logs on a car equipped with what we term the turtle back bunks; I don't know what ordinarily that is, but it is seven or eight cents per thousand, or something like that.

Mr. Carey: That is to represent the saving to the logger in the unloading——
A. So that he won't have to cut any stakes.

Mr. Murray: Going back to the hauling lumber on log flats—you say lumber and wood is lighter than logs, isn't it true that a carload of lumber is a heavier load on a car than a carload of logs is?
A. Yes, if you have the more weight on it. Ordinarily they wouldn't load more weight in lumber than they would in logs although the lumbermen is just as bad as the logger—he will overload the car if he can.
Q. Taking what you said here this afternoon, your carload of lumber will be heavier on that car than a carload of logs——

Mr. Daniels: You stated when you took the stand there was some misunderstanding as to the term bunks as applied to log flats. That, I believe, was in connection with the previous witness. Are we to understand now that when he quoted the term "bunks" that he referred to wooden bunks as well as steel bunks?
[fol. 96] A. I don't know what he referred to, but it was very mixed up.
Q. My purpose in asking the question of him was as to whether

his thoughts covering the cars equiped with bunks referred to steel bunks, for which we are paying an extra cost of eight cents per thousand. I believe it applies to the cost of upkeep of that bunk. In other words we provide the upkeep of that bunk. I was trying to determine whether his statement of cost which he introduced in evidence, covered the cars so equipped with those steel bunks or whether it covered all the cars, and if so if we could get a statement of cost of equipping the cars with steel bunks separate from those equipped with wooden bunks. Do you know whether his statement covered both kinds of cars or not?

A. I am not positive about it, but I was under the impression that his statement covered the cost of repairs to all logging flats, which included wood and steel bunks.

Q. That was my impression. I understood his answer to my question being that it only covered wood bunks——

Mr. Ingalls: It covered all the cars in those series whether it was equipped with steel or wooden bunks.

The Director: Now the Commission has some matters to attend to in the morning which will probably require until about eleven o'clock. In view of the fact that many of those present desire to examine into those exhibits that have been introduced, we will take an adjournment until tomorrow morning at eleven o'clock sharp.

Tuesday, April 12, 1921, hearing continued, all parties present as before. Mr. Dow on the stand.

[fol. 97] The Director: Come to order please. Call your next witness Mr. Dudley.

Mr. Dudley: I would like to ask Mr. Dow some more questions.

Mr. Dudley:

Q. How long have you been superintendent of the Coast Division of the Milwaukee, Mr. Dudley?

A. About three years.

Q. Have you worked on the coast before that time?

A. Yes, about five years.

Q. In what service?

A. As train dispatcher and chief dispatcher and trainmaster.

Q. For the Milwaukee?

A. Yes sir.

Q. With headquarters at Tacoma?

A. Yes sir.

Q. That has always been the headquarters of the coast division?

A. Yes sir.

Q. Now I wish you would state in a general way how these logging operations are carried on from railroad standpoint, the transporation side of it?

A. I don't know as I just understand, Mr. Dudley, but I presume you want an illustration of the operation?

Q. Not necessarily a concrete illustration but compare it with your ordinary type of business, does your log car move more or less than an ordinary car, and in switching your cars——

A. Well, the logging business is much different from the ordinary revenue business. As a rule a logging flat will move in one direction empty. In an ordinary car you can get a load in both directions, a [fol.98] larger percentage of the time. In the logging business it is necessary to provide enough equipment to take care of the output of the camp by assigning enough cars to the operation to take care of it or their output and in arriving at a sufficient number of cars you have to take in consideration the movement of the car between terminals in each direction, the time necessary for the logger to load it, and the necessary time for him to unload, with a reasonable margin or a percentage allowed for unavoidable delays. For example a logging camp working one side getting out ten cars a day would necessarily have to have log flats in the woods one day and it would take a day moving to the unloading point and a day's delay there which would make another day going back. That would make four sets of cars to take care of ten cars per day.

Q. So you have to have forty cars to carry on a ten car a day operation?

A. Yes and add to that what we found by experience to be about 15% allowance for bad order cars. So that you would probably have to have fifty cars to handle it. You would have to have fifty log flats to adequately take care of a man that was getting out ten cars per day on an operation of that kind. In addition to that you cannot figure on unloading logs like you can other material or ordinary freight. When your logs arrive at your yards or your terminal you must have facilities for unloading them and you are controlled a good deal by the tide, especially on the sound; you can only dump at particular times, where on other commodities or freights you are not bothered with that.

[fol. 99] Q. You haul considerable logs down to South Bend and Raymond on Willapa Harbor?

A. Yes.

Q. And those logs are dumped about where?

A. They are dumped at what we call the Sunset dump, just east of Raymond in the Willapa River.

Q. Can you dump at that log dump at all stages of the tide?

A. No, about 60% of the time you can't dump there on account of the tide.

Q. And if your train arrives there at the wrong time you simply have to wait until the tide gets so you can dump the logs?

A. Yes, if you arrive in the afternoon with a train of logs and the tide isn't right you would have to wait until the next morning, or else put on a night crew which you can hardly afford to do to dump the logs.

Q. Now something was said on another question, how do you handle logs that fall off in the course of transportation?

A. Well under ordinary conditions we try to pick some day or some time in the logging business, that is around the 4th of July or some holiday period. In the winter we have more flats available and we start out and with a derrick and pick them all up and we sort them all up and handle them the same as a logging firm settles with the owners. We have to send a train out to do it.

Q. Can you do that—is there any falling off of any freight?

A. No, there is no freight that falls off the cars like logs.

[fol. 100] Q. And in picking up logs and logging you pick up the cars at different points—as a matter of fact you pick up your carloads of logs at different points?

A. I didn't get that.

Q. You pick up your carloads of logs at one point or at different points?

A. No, if the logging operations are extensive enough we can handle them on a regular logging train, but there is a great many operations where we pick up the logs by trains which we use for various purposes, handling merchandise, that varies of course. They have to be picked up at sidings when business is good you can handle nothing but logs, but they have to be picked up at different points.

Q. As to the greater portion of your business can you run solid logging trains or do you have to pick it up with mixed trains?

A. Well, that is governed by the amount of business. Take on our Everett line for example. Up to the present time we have not run any log trains, we have let the regular trains do the log work and it is getting so heavy now we will have to relieve them with an extra train.

Q. Does the handling or picking up of logs in this way involve an excessive amount of switching?

A. Yes, it does where they are shipping to different points. A logger may be loading cedar or fir and he will give you seven or eight cars, and the cedar goes to one destination and the fir to an-

[fol. 101] other and you have to switch that out. And the same thing when it arrives at the terminal, you have to switch the cars out and deliver to the proper destination, where there is more than one unloading point.

Q. Take the short haul of logs as compared with the longer haul, which costs the greater per mile?

A. Well, that is obviously the shorter haul. In either case you have the cost of a terminal charge and I presume that the figures would show—I have not any figures to show—that a very large percentage of the cost would be at each terminal where you picked up your car and where you unloaded your logs, and the curve of expenses would not run up with the mileage because there would be a great deal of it absorbed in the terminals on a short haul.

Q. So that a log rate then should be prepared then with a heavier charge for the initial short haul than if you put it on a mileage basis? It increased in amount as your mileage increases?

A. Yes, because it would not cost you much extra to haul a car ten or fifteen miles more after you had it loaded once.

Q. Now speaking about terminals, there was some question asked yesterday as to what extent we were using the Seattle terminal, where is your principal terminal Seattle or Tacoma?

A. Well, our principal terminal is at Tacoma.

[fol. 102] Q. To what extent is the terminal at Tacoma used in your log haul?

A. Well, in an ordinary business we get about fifty or sixty carloads of logs a day into Tacoma, which as a rule dump at our Milwaukee dump. Occasionally the logs go to the St. Paul Mill but not very many of them.

Q. You have some logs hauled into Tacoma there do you not, to the mills there where you don't dump into the water—the mill on First Street?

A. Not very many. There are just a few cases of that kind. There is no general operation, except where we dump at either the Milwaukee dump or the St. Paul Mill.

Q. You have terminals at Raymond on Willapa Harbor?

A. Yes sir.

Q. And to what extent are they used in the logging business?

A. Well, that is a little heavier. I presume in ordinary business, in ordinary times we get eighty cars of logs into the Raymond terminals.

Q. You are not familiar with the operations on the Olympic Division and the Bellingham Division?

A. Never saw them.

Mr. Dudley: I think that is all.

[fol. 103] Cross-examination.

Mr. Henderson:

Q. What do your terminals at Tacoma consist of, the log terminals?

A. Do you mean just for taking care of logs?

Q. Yes, just for taking care of logs.

A. Well, we just use two or three yard tracks and the logging dump track.

Q. How long does it take you to dump ten cars of logs?

A. Well, I have never timed them but I would say about 40 minutes.

Q. Do you know of any other kind of traffic that you can unload 10 cars in 40 minutes?

A. We don't unload any other traffic.

Q. Who does the unloading at Tacoma, the Milwaukee railway or the log shippers?

A. We work in conjunction. Our switch engine hooks on to the cars and they furnish the men to handle the logs.

Q. They do the dumping, all you do is to spot the cars?

A. Another thing if we unload a car of grain we take the engine and spot it and go away.

Q. And with the logs you take the train in there and spot the train and in 40 minutes you pull them out?

A. But we have to hold a train there to spot the next train and haul them away.

Q. And it would take you a great deal longer to hold it there—say that you used all of your engine and your yard crew for handling 10 cars of logs, you unload it in a great deal less time that would be necessary for spotting 10 cars of any other kind of material you handle?

A. Not if the 10 cars of material were all consigned to the same party, the same as the 10 cars of logs were.

[fol. 104] Q. You don't have 10 carloads for any other shipper besides logs?

A. Oh yes, grain and export stuff.

Q. And you spot 10 cars at one place?

A. Yes.

Q. And you have to go and spot them and then come back and get them?

A. Yes.

Q. So that in handling those 10 cars could you spot the 10 cars to the Tacoma Grain Company for instance, and leave them there and come back, you would consume 40 minutes in spotting those cars would you?

A. Yes but you would do a lot of other switching perhaps on that trip.

Q. Yes, but the 40 minutes in so far as the ten cars are concerned would be consumed in handling those 10 cars the same as it would in handling 10 cars of logs?

A. No I don't believe you understand what I am getting at. Your 40 minutes that I speak of is the dead time that you are standing still waiting for some one to unload the cars. The time it takes to take the cars to and from the unloading point is the same as any other car.

Q. But if you spot the 10 cars of grain and cut your engine off you make two trips to the mill, one to spot your car and the other to go and get it?

A. But you are using your engine in the meantime.

Q. But with your log train you take your train in here and hold it for 40 minutes and then you pull your cars out?

A. Yes.

Q. Now you are familiar with the West Fork Logging Company's operations on the Tacoma Eastern?

A. Yes sir;

[fol. 105] Q. Now assuming that they were getting out one side, say 12 cars per day, you would spot 12 cars in there at night, wouldn't you?

A. Well we would try to deliver them the day before.

Q. Don't you usually in your operations now, spot them either in the evening or in the morning?

A. In that particular place, no.

Q. Why not?

A. Well the crews that bring the log flats from Tacoma, run at night arriving at Mineral early in the morning and they are taken over to the West Fork operations that morning.

Q. When do you take the cars out of the West Fork Company's yards?

A. They are taken out there at the present time about noon.

Q. In the daytime?

A. Yes sir.

Q. And at that time you spot—if you take 12 cars away you leave 12 cars?

A. Yes.

Q. Now, how long does it take you to take those 12 cars to Tacoma for instance?

A. You mean how much time is consumed in running?

Q. Yes in taking those 12 cars to Tacoma after you leave the West Fork *Years*?

A. Well if we keep the logs moving and the train didn't stop any place it would take about 9 hours. If they didn't stop at Mineral and change crews or anything. We do change crews at Mineral.

Q. How long then would it take that string of cars leaving the West Fork Company's yards to reach Tacoma?

A. If it was loaded, for example, if we received the load on Monday noon it would be received in Tacoma Tuesday evening.

[fol. 106] Q. It would take all that day to get to Tacoma?

A. Yes.

Q. How long would it take you to get it back there, the same length of time?

A. Yes, about.

Q. So that if your 12 cars left West Fork Monday noon and got in to Tacoma Tuesday evening, when would you start back with it?

A. Wednesday evening or Thursday morning, according to the amount of business. If there was very much of it we would run a train at night.

Q. You would have regular trains running on that probably?

A. No regular log trains at the present time.

Q. You have regular freight trains?

A. Yes.

Q. So they could pick up the logs' flats and take them back on their regular trips couldn't they?

A. Yes.

Q. Now when would you get those cars back to the West Fork Company if you left say Thursday morning?

A. They would be in there by Friday noon.

Q. So that takes three full days?

A. Yes.

Q. To get those cars out how far?

A. About 70 miles.

Q. And that is as far as you move their products out for them?

A. At the present time, yes.

Q. So that you have in service 12 cars for 3 days, just to make that one delivery—12 cars?

A. Yes.

[fol. 107] Q. And at the time you went in there you would spot 12 cars?

A. Yes.

Q. And they would be using those cars while you were going on with your cars so that ought to take 36 cars to handle your West Fork business?

A. It would take more than that. I have not allowed them anything to work on at West Fork.

Q. I am allowing them to keep 12 cars there while you are moving 12 cars?

A. You have 12 cars in his camp and 12 cars coming down?

Q. Yes?

A. And you have 12 cars at Tacoma getting unloaded today, and 12 cars going back.

Q. You only use them three days in service going and coming?

A. Yes.

Q. Now he has 12 cars each day that you are using them?

A. We have not allowed any 36 car assignment, you have to let him have some flats for use in the woods, while we have sets on the road. There is a set coming down, from his camp to Tacoma every day, and there is a bunch of cars going back every day, and there is also a day at Tacoma when they are unloading and repairing and at the same time while those three sets are unloading he has a set in his camp to load.

Q. Do you keep the cars 3 days in Tacoma to repair them; it takes 40 minutes to unload them and it takes you the rest of the day to spot them and get them out.

A. You only unload the 10 cars in this 40 minutes. We don't turn the cars right back when they arrive at Tacoma, they have to be switched out to each consignee.

Q. They are dumped in one place in Tacoma?

A. Yes, but we wouldn't dump two fellows logs at the same time.

[fol. 108] Q. Wouldn't you dump them all in the dump there?

A. We give each fellow the chance to boom them and take them away.

Q. Don't they all come down here to one consignee?

A. Yes.

Q. So that there would be no trouble on that score——

A. Not as between his own logs, but there are other shippers that have to unload logs.

Q. So you would consume some time waiting for the other shippers to get their logs out of the way?

A. Well if it happened to be some other shipper's logs first—you cannot always unload when you get to Tacoma; lots of times you have to wait 4 or 5 hours before you can dump.

Q. Well you have the whole day there.

A. Yes.

Q. But according to your figures it would take you three days

to get the cars from the West Fork Company's yard down to Tacoma and back?

A. Yes.

Q. Those 12 cars would be in service 3 days and there would be 12 cars more the next day and 12 cars the next day that makes 36.

A. You couldn't run a camp that way, you would be short a set of flats. There would be a set in the woods loading.

Q. How many cars have you actually assigned to the West Fork Company's operation?

A. I don't know at the present time; I don't think there are any cars assigned, because the logging business is not very heavy enough so that we have to do it. We give Mr. Murray, enough to last him every day.

Q. And he is getting out about 12 cars per day?

[fol. 109] A. I think so.

Q. And you have assigned no particular number of cars to him?

A. It is not necessary at the present time.

Q. Do you ever do that?

A. Yes we do that in some operations.

Q. When did you ever assign any specific number of cars to the West Fork Lumber Company?

A. We never did to their operations.

Q. And they have had as many as 30 cars per day?

A. Yes sir.

Q. How many cars have you—logging flats—on the Tacoma Eastern Division?

A. I don't know, we have about 1,000 or 1,100 on the entire division.

Q. That takes in the Tacoma Eastern and what else?

A. The Everett line and the Grays Harbor line.

Q. And there are heavier assignments at Everett than there are at Tacoma, aren't there?

A. Well that varies according to the business. Sometimes the logging is heavier on the Everett line than it is on the Tacoma line, or the Tacoma Eastern. At the present time the logging is heaviest on the Everett line, but it is liable to reverse.

Q. You haven't any idea how many cars you have on the Tacoma Eastern, have you?

A. No. There is one of our men here that can probably give that information.

Q. Now you are speaking of picking up seven cars at one place, and I gathered from your testimony that because you picked up seven cars it might cost you more than just picking up one car, is that true?

A. Why, that would naturally follow.

[fol. 110] Q. But it would be a great deal more economical for you to pick up seven cars at one point than seven cars at seven different points?

A. Certainly.

Q. So if you could get the logging business where they could

furnish you 7 cars at one point it would be more economical than some other commodity at 7 different points.

A. Yes.

Q. And the rate should necessarily then be cheaper where you are picking up 7 or 8 cars at one point than it would be if you are picking them up one at a time at different points?

A. I presume that is the rule but I don't know that that applies to any other commodity or that any tariff provides for it excepting the log tariff as far as I know.

Q. Now you spoke about the log flats being empty one way and that in other commodities you use the car both ways.

A. Yes.

Q. Is that true in actual operations, don't you really have as large an empty car haul with ordinary box cars as you do on log flats?

A. No sir.

Q. Don't you think you get more loaded mileage out of your log flats than you get out of most any other kind of commodity?

A. No sir.

Q. Do you think your figures will show that?

A. Yes.

Q. Will you have any figures here that will show the average daily business over any certain period on the Tacoma Eastern so that we can get the number of cars over a fixed period—the number of cars per day—will you have figures to to show how many cars you will have on the Tacoma Eastern?

[fol. 111] Mr. Dudley: We have not prepared that tabulation yet. The data will be furnished. I am going to ask permission of the Commission before the matter closes to furnish that, it will probably take a week or ten days to tabulate the statement showing the log movement, on all of our different divisions. We can show that by the number of cars which move from each point and the mileage, with the applicable rate, and the cost as shown by the operating costs which will be introduced in evidence. I will ask permission of the Commission to prepare such an exhibit for filing later on.

The Director: Then prepare enough copies to serve all the parties.

Mr. Dudley: Yes I will. I don't know just how many copies they brought, but I will prepare copies enough.

Mr. Henderson: Now, Mr. Dow, are there any other places on the system besides Tacoma, where the railroad Company owns its log terminals?

A. Not exclusively.

Q. At most other points the log terminals are owned by the logging company or the booming company?

A. Yes, usually on a joint arrangement. For example, in order to explain that, on the Everett line we have a log dump that is shown—we maintain part of it and the logging companies maintain part of it.

Q. In what proportions do you know?

A. Well they maintain all the understructure and we maintain the upper structure—the track part of it.

Q. You maintain the track and they maintain the piling, and you maintain the ties?

A. Yes, we maintain the ties and the rails, they take care of the proportion underneath.

Q. And they do the unloading?

[fol. 112] A. Yes sir.

Q. And take care of all of the dump except that you maintain the track on it—the ties and the rails?

A. Yes, and we take care of the track that leads to the dump.

Q. And who takes care of any damage that may be done to the dump by reason of the loading and unloading?

A. The log company would take care of it if it damaged the understructure. If it was the ties and the track we would take care of it.

Q. You would not charge any damage by reason of the unloading to the boom or the log company?

A. No.

Q. You don't have much damage to rails or ties in unloading logs do you?

A. Not except when an accident happens.

Q. I mean the ordinary service wouldn't damage the ties? The logs don't strike the ties, they fall over them, they don't hit them?

A. If the log dump is properly constructed a brow log is provided so that the log will strike that and roll off and won't damage anything.

Q. Now can you think of any other place at Tacoma besides your system where you are dumping where the company owns its own logging dump?

A. No, I don't recall any.

Mr. Clifford: Just refer to pages 6 and pages 7 and 8 of the Commission's exhibit, Mr. Dow, you will see that the minimums shown there as applicable upon your lines run from 5,000 to 8,000, can you state what is the justification for the variations in the minimums?

A. I don't believe that I could intelligently reply to that question in a manner that would be of any good to anybody. The only thing from the operating standpoint that I would think justified any differ-

[fol. 113] ence in the minimum would be on the class of logs or the capacity of the cars used. We have a traffic man here that can probably tell you more about it than I could.

Q. You can not state whether or not a different practice with regard to minimums is followed in Eastern Washington than in Western Washington?

A. I could not answer that, no.

Mr. Dudley: May I make a statement in that connection?

Mr. Clifford: Yes.

Mr. Dudley: I would say that the Tacoma Eastern was built by people engaged primarily in logging, the transportation problem being a secondary consideration with them. It was acquired by the Milwaukee in 1909. They had at that time various outstanding contracts and various tariffs. Their earlier tariffs and contracts pro-

vide for 5,000 minimums, when smaller cars were used. Later on larger cars were employed and that minimum was increased. A good many of those tariffs have been abolished. I don't know how many of them.

Mr. Clifford: Well Judge, can you state what is the justification for the rather high minimum applicable in Eastern Washington. There are some here that run up as high as 8,000 feet—item 190 on page 8, movement from Metaline Falls, Washington, to Spokane, Washington, 8,000 foot minimum.

Mr. Dudley: There are two explanations to that. That was another road which the Milwaukee built primarily for the logging business. It was built on the scale of a transcontinental road. I think it is the finest piece of track that was ever built, but that business orignates—and we have inherited certain tariffs in connection with that, but the logging business there orignates in Idaho. It is a different class of timber entirely from the Western Washington timber.

Mr. Clifford: Will you have a traffic man later on, Judge, to place on the stand as a witness in regard to these minimums?

[fol. 114] Mr. Dudley: Yes, I have now men here, but to what extent they are familiar with the Tacoma Eastern traffic I don't know. But I will put a man on in that connection.

Mr. Clifford: Mr. Dow, can you express in a percentage the relation of the loaded log car miles to the total log car miles?

A. I would say about 50-50.

Q. Well now isn't there some substantial movement on the back haul of those empties?

A. No load for them; you couldn't afford to delay them for another load.

Q. Where the log haul is to a competitive point and you attempt to get the movement of the resulting product of lumber, isn't there a loading of lumber in substantial volume of those cars in times of car shortage?

A. They do load them sometimes but it doesn't amount to anything, it is a very small percentage. You spoke of one thing, in times of car shortage. We try our utmost to not allow anybody to load a logging car with anything but logs. They do get them sometimes and load them but we don't allow it as a general thing, that is, we try to keep away from it. If a fellow had a donkey broke down and then wanted to ship a casting out to his log camp we would let him load it on the log flat, of course, we wouldn't deprive him the privilege of getting it out to his camp, but these are very few cases.

Q. You don't believe that is a very substantial movement?

A. No.

Q. Now could you compare in percentage or otherwise, the volume of log movement that moves in trainload lots compared with the volume that moves in carload lots on your system?

A. I could not give you any figures on that.

Q. Can you approximate it?

[fol. 115] A. No, for this reason, that as far as we have records in

our operating office it doesn't show whether the train is moving under a carload rate or trainload rate. There are just so many carloads of logs to it.

Q. At competitive points can you state what percentage of the outbound products resulting from the log haul you derive where you make the haul yourself—do you get my point?

A. As I understand you, you mean to ask what proportion of the lumber we would get from say 50 cars of logs hauled into Tacoma?

Q. Exactly, and vary your answer as between the competitive points that is on the tidewater and one that is not.

A. Where logs are hauled to a location like Tacoma, at tidewater, the chances are that we wouldn't get any of the lumber.

Q. Well, can you state what happens in practice, that is what I am after?

A. Yes, all logs that are brought into Tacoma are sold in the general market as a rule, and these mills that purchase the logs in the majority of the cases are not located on our lines at all for shipment of lumber.

Q. Now take a competitive point, that is not on tidewater, what is the situation there?

A. I think that where we haul the logs in that we get a greater proportion of the business as compared with the line that didn't handle the logs.

Q. What percentage?

A. I could not say.

Q. Well, couldn't you approximate it?

A. I could do nothing only guess at it.

Q. Well from your knowledge of the movement can't you say what percentage it would be?

[fol. 116] A. No. I don't believe I could give any statement that would be of any value to anyone.

Mr. Henderson: There is one question that I overlooked along that particular matter that you testified about, and that was in reference to picking up the logs that fall off. Your tariff provides that you charge that up to the shipper, doesn't it?

A. I believe the tariff has modified that in certain cases.

Q. That is you charge that to the shipper except where it is wrecked by some defect caused by the carrier's fault?

A. Yes.

Q. So that any logs that fall off by reason of bad loading and you pick them up you charge that to the shippers?

A. We should.

Q. And your tariff so provides?

A. Yes.

Mr. Dudley: I object to that I don't know of any such operations.

A. Yes there is.

Mr. Henderson:

Q. Now have you any figures with reference to the amount of lumber that you haul out as compared with the amount of logs that you haul in?

A. No I have no such figures.

Q. Would you say that you do not haul any lumber, an equivalent amount of board feet to the number of board feet of logs you haul?

A. If we haul the logs to a point where no other company can get them we do, but if we haul them to points like Tacoma or Hoquiam where there are a great many mills——

Q. What I mean will your total shipments of lumber equal your total shipments of logs?

Mr. Dudley: We will object to that as immaterial.

[fol. 117] Mr. Henderson: He was testifying as to the amount of haul that they got from the logs that were hauled in a short time ago.

Mr. Dudley: I think that under the decision in the Supreme Court of the United States in the North Dakota case that the question of the lumber haul is disassociated from any question of the log haul. They are two separate propositions. Of course if it were a milling in transit proposition it would be a different thing, but where it is a hap-chance, you may get the lumber or you may not—then any relation between the amount of logs hauled in and the lumber shipped out has no connection with each other—no relation existing at all, and therefore I object on the ground that it is immaterial.

Mr. Henderson: One of their experts testified on the stand yesterday that their log rates were based on the proposition that they would get the haul of the lumber out and the tariff so states, so it seems to me it is very material, not only to the actual tariff but as to the building of the tariff.

The Director: The witness answered that he didn't know.

Mr. Dudley: The witness stated that was one of the reasons for the low rates; that the reason for making the tariff with that unreasonably low rate was on that theory, but in practice it didn't work out.

Mr. Henderson: That would be a matter of evidence, but I am trying to find out whether it does work out, and this witness says that he cannot testify so I think it is a moot question anyhow.

The Director: Any other witness?

Mr. Henderson: Can you give us an estimate of the percentage of the log business to the entire business on the Tacoma Eastern?

A. That is a very hard question to answer except in a general [fol. 118] way, on an average. Sometimes the log business would be heavier than the lumber business and at other times the lumber business would be heavier than the log business, but I presume that there is half of loads in on the Tacoma Eastern that are logs, in ordinary times.

Q. Now the lumber business and the timber product business is naturally based upon the log business, that being the first operation?

Mr. Dudley: I beg your pardon, in exhibit No. 3 these percentages are given.

Mr. Henderson: They are given?

Mr. Dudley: Yes.

Mr. Henderson: Referring now to the lumber and timber products, I say the first operation on that commercial line is the log business, that is the foundation of it?

A. That is the first movement.

Q. That is the starter of it. Now can you give us any idea of the percentage of lumber and lumber products on your railroad to the entire amount of business on your railroad?

A. I should say it was 70 or 75% eastbound.

Q. So that on the road that you are Superintendent of 75% of your business originates with the logging business, is that correct?

A. Yes I believe that is right.

Mr. Dudley: You don't mean originates with the logging business?

A. Well, he said the lumber business.

Mr. Dudley: But it don't necessarily originate with the logging business that you have done?

Mr. Balmer: Furthermore you are speaking only on eastbound movement.

A. I said 60% on eastbound cars.

[fol. 119] Mr. Henderson: Well I will ask you this question; give the percentage of the total business on the Milwaukee that originates with the lumber business and lumber products?

A. You mean on my division?

Q. Yes, the total business both ways.

A. Probably 50%.

Q. Don't you think it will run more than that?

A. It possibly would, I never looked up those figures.

Q. Would you say then without looking up your figures that at least one-half of the business that is done on the Milwaukee division over which you are superintendent originates with the log business, is that right?

Mr. Dudley: Objected to as immaterial and irrelevant and not an issue in this case.

The Director: Well, I think he can answer the question.

Mr. Dudley: The witness is not a traffic man.

The Director: If he can answer it, let him answer it, it may not be material.

Mr. Dudley: Exception.

Mr. da Ponte: I don't think the witness ought to be required to guess at these figures, if the statstics can be supplied they will speak for themselves. He is just making a wild guess without any data before him.

The Director: If he is willing to venture a guess it is up to him, we will take it as a guess.

Mr. da Ponte: The exhibits will be in evidence showing every one of these things, gotten up by the accountants.

The Director: Answer the question if you can.

(Question repeated.)

A. It originates with the logging business but it does not consist entirely of the logging business that we handle.

[fol. 120] Supervisor Cleland: Do you mean by that that 50% of all the business on your division involves the movement of logs or lumber products—something originating from logs—coming from logs?

A. Yes, but that wouldn't mean that it was based upon the logs that we handle. Somebody else might handle the logs.

Supervisor Cleland: I appreciate that, but 50% of your business is logging or lumbering?

A. Yes sir.

Mr. Henderson: And is it not a fact Mr. Dow, that you make tariffs with the idea of getting as large a percentage as possible out of the timber products business. For instance you will make milling, dressing, sorting and kiln drying rates for lumber, in the nature of a milling in transit business in order that you may develop low rates for that business?

Mr. Dudley: Objected to on the ground that it is immaterial and second that there is no qualification shown on the part of this witness to testify on this matter, and further it is not cross-examination, the witness is not a traffic or a rate man.

The Director: I don't think that would be material in this case as relating to a milling in transit movement.

Mr. Carey: We were discussing yesterday the possible equipment of flat cars with wooden and steel bunks and you said you would get some information today, have you got it yet?

A. Not yet.

Q. You will have it today?

A. The difficulty has been on account of the variance in the price of bunks.

Q. You will get it some time before you leave?

A. Yes sir.

Q. And those flat cars, are those all 40-foot cars?

[fol. 121] A. As a rule. Well I would say 80% of them were 41 and 42-foot flat cars. The logs as a rule are 40 foot and we have to allow a little.

Q. But they are all of rather uniform length?

A. Yes, they are 41 foot up.

Mr. Welsh: You said in answer to a question of Mr. Henderson that you would require 50 cars, 50 flats, to handle a 1 side 10 car operation?

A. Ordinarily that would be right.

Q. Do you know how many cars you had on the Willapa Harbor or Raymond Division during the year 1920, how many flat cars I mean, that is I mean logging cars, I am directing my attention to logging?

A. I couldn't answer that now, I think some of our organization have the records however, I haven't them.

Q. Are you aware that during that year you handled the logs from 7 camps that were operating one side or more?

A. Yes I believe there were that many camps.

Q. And are you aware that you didn't have in service on that road at any time to exceed 140 cars?

A. I don't know about how many we had, somebody here though I believe, has the exact number of cars that were in service, but I cannot recall it off hand.

Q. According to your figures it would have required to handle that, 350 cars, wouldn't it, 7 camps of 1 side or better, assuming that they were all one side, or 50 cars per camp?

A. Yes, that operation on the Willapa Harbor Line will run away below that average as to the number of cars.

Q. Now in answer to another question you started to say and got part of it in the record, that points like Raymond and Tacoma, that the lumber haul out wouldn't anywhere near equal the log haul in, [fol. 122] did you want to be understood as having that apply to Raymond?

A. Yes, that is to the best of my knowledge.

Q. Where did you get your information?

A. Well, at the present time we get out of Raymond about 6 or 7 loads of lumber per day and we haul about 40 or 50 carloads of logs in. That is speaking in general terms. That gives me the idea that it is evident that we don't haul as much lumber out as we haul logs in.

Q. During the year 1920 don't you know that you hauled out a greater percentage of lumber than you hauled logs in?

A. It might have been possible.

Q. And if you are familiar with the local conditions there, don't you know that the greater portion of the logging never passes over a rail until it is manufactured?

A. Well that is true with the lumber also.

Q. Now speaking of another thing in connection with Raymond. You spoke of the time in which you could dump at the Sunset Dump, to what period were you directing your remarks when you said there was 60% of your time you could not dump there?

A. I don't think that I made that statement.

Q. Yes you did.

A. That there was 60% of the time that I had to wait for tides?

Q. Yes.

A. Then you misunderstood me.

Supervisor Cleland: What did you say?

Mr. da Ponte: He said 40% of the time he could dump, and 60% he could dump.

Mr. Welch: Well, now, isn't it a fact that at the present time you can dump 100% of the time?

A. While the water is high in the river.

[fol. 123] Q. Yes, but are you aware that that was dredged out last fall at a cost of several thousand dollars?

A. Yes.

Q. And that you could dump 100% at the present time?
A. Yes, I believe you could.
Q. And are you also aware of the fact that it requires about a minute or possibly less to unload each car, and that has always been true at the Sunset Dump?
A. Well, you speak of the actual logs coming off the car when I referred to the time consumed in dumping—I mean the time taken by an engine in going in and dumping and taking care of the car; the logs sometimes average one and a half a minute.
Q. You evidently are not familiar with the method of dumping at the Sunset Dump. Isn't it a fact that the Sunset Dump is equipped with a Donovan Pusher and that the train is merely backed in against the pusher and as each car passes the pusher it pushes the logs off and the train is always in motion until it is unloaded, that is it takes the same length of time to push the cars past a given point?
A. Yes.
Q. And the breakage of cars there is a minimum——
A. I believe it is about as economical a place as we have for dumping.
Q. And that is due to the fact that the logs are pushed off and that there is no fall from the top on to the car below?
Supervisor Spinning: How fast is the movement on that system?
A. In the operation of which he speaks?
Supervisor Spinning: Yes.
A. They wouldn't move over two or three miles per hour.

Mr. Welsh: Just at about the rate that a man walks when he is ordinarily walking down the street.

[fol. 124] Mr. Dudley: In the operation of pushing the cars, the cars come in there on your main line with the engine ahead of the train, doesn't it?
A. Yes sir.
Mr. Dudley: Then you have to detach your engine, switch it back and get it into the rear of the train and then push the train over this log dump track?
A. Yes.
Q. So that you have a switching movement there?
A. Yes, that is all included in the time we count that is assigned to unloading logs, the actual time that it takes for the logs to go off the car is very small but there is a lot of incidental work and the cars have to be switched away and looked over and if there is anything in bad order, switched out and taken to the rip track for repairs.
Supervisor Spinning: What percentage of the Milwaukee movement is handled in that way?
A. That is the only place where we have an unloading machine of that kind. Most of our dumps are an incline dump, the cars go onto an elevated rail and one rail is elevated and the stakes are cut previous to their being put in there on that track and then the logs roll off themselves. There are several methods of unloading logs.

Mr. Welch: During the proceeding, later on I will state that I will hand you a photograph of the Donovan Pusher.

Mr. Dudley: Your Honors will understand as to what extent that method of handling is done on the Milwaukee. The witness speaks only for his own division. There is a similar arrangement at Bellingham and one at Port Angeles. There are three places where this automatic unloading machine is used. I don't know whether it is the Donovan method or not.

Supervisor Spinning: What percentage of your logs are handled that way, do you know?

[fol. 125] Mr. Dudley: I do not.

Mr. Welsh: The cost of installing that dump was almost nothing and the cars are put on a level track.

Supervisor Spinning: As a logger, Mr. Welsh, would you suggest the installation of that system all over?

Mr. Welsh: I certainly would, for the benefit of the logger and the road both. The logs are unloaded while the train is in movement.

Mr. Welsh:

Q. Now, Mr. Dow, in order to get this before the Commission, the cars moving down the Milwaukee line towards Raymond move down the main track—when they get to the Sunset Dump there is no switching, you merely pull below that switch to the westward of the switch, back in onto the Sunset Dump and as you back in your logs are pushed off the cars and you pull your train out?

A. Yes.

Q. That is your only operation in dumping?

A. Yes, you have to pull your flats out and hitch your engine on the other end going west, if you were going to stay there you wouldn't need to do that even, you could do it the following morning.

Q. What I mean is, there is no terminal operation there?

A. No, except that the cars have to be switched out when they are in bad order.

Q. But that is the only terminal operation?

A. Yes.

Mr. Balmer: Don't you have anything in the way of car inspection at your terminals, Mr. Dow?

A. Yes.

Q. Describe that will you and the time it takes on the log business?

[fol. 126] A. Well the inspection of a log car is made on the arrival at terminals where the inspectors are located. There is a man that goes on each side of the car and looks for safety appliance defects and mechanical defects, and the ordinary inspection of a train of logs of 40 cars takes an hour and a half.

Q. Do you make an inspection both before and after the cars go to the dump?

A. No sir, there is only one inspection, while it is at the terminal.

Mr. Henderson: You do that on all cars, boxcars as well as flatcars?

A. Yes.

Q. So that there is no more expense on a logging car at a terminal than any other car?

A. As far as inspection is concerned it would not take any longer.

The Director: We will take a recess until 1:30.

1.30 p. m. hearing continued, all parties being present as before.

Mr. KELLOGG recalled.

Mr. Dudley:

Q. Did you prepare a statement showing the average length of the log haul during the period of 1919?

[fol. 127] A. I prepared the figures based upon the point to point car movement, submitted in the exhibits I presented yesterday. That showed the actual point to point log movement for 9 months of the year 1919, taking the total number of cars shown for those 9 months and the total loaded car miles and figuring it out I secured the average haul for the divisions shown in that statement.

Q. Have you but one copy of that?

A. I have but one copy. I had prepared a statement which was incorrect and I checked it over and have made correct figures.

Q. I will ask you to read those figures into the record.

A. For the Bellingham Division there was a total of 6,668 cars; total loaded car miles 195,059, which makes an average haul of 29.2 miles. The Olympic Division, 5,755 cars, total loaded car miles 175,455; average loaded car haul 30.4 miles. Willapa Harbor Branch, 6,526 cars; total loaded car miles 69,634; average loaded car haul 10.6 miles.

[fol. 128] Mr. Dudley: Now if the Commission desires I will have those figures typed in a formal exhibit and filed with the Commission, if they prefer to have it in that shape.

The Director: I think it should be, and copies furnished to the parties.

A. (Continuing:) The National Park Branch 13,794 cars; total loaded car miles 393,987; average loaded car haul 28.5 miles. The balance of the state, that is, this is figured only on intrastate movement and does not involve any interstate movement, so that the balance of the State of Washington other than the divisions I have already mentioned shows 35,827 cars; total loaded car miles 855,209; average loaded car haul 23.8 miles. That is for the nine months of the year 1919 as covered by the exhibit I presented yesterday, April to December inclusive. Now the total intrastate log movement of that period figured 68,570 cars; total loaded car miles 1,689,344, with an average haul on intrastate business of 24.6 miles.

Mr. Dudley: Mr. Clifford, I think you desire to question the witness with reference to the minimums, you may inquire.

Cross-examination.

Mr. Clifford:

Q. Will you refer to pages six, seven and eight, I believe it is, of the exhibit. I find that the minimums stated on those pages applicable to movements on your line range from 5,000 to 8,000 feet, can you state what is the justification for that variation in the minimums?

A. I think Mr. Dudley explained a part of that this morning in his statement to you as to the low minimums, which you will note are in effect practically in all cases on the old Tacoma-Eastern, the old minimums that we inherited when we bought the line.

[fol. 129] Q. Well is there any good reason for the diversity continuing at the present time?

A. From information I have obtained I would be inclined to think they could probably load as heavily there as elsewhere. We have made it a general practice in establishing rates to use 7,000 feet as a basis, with the exception of rates in Eastern Washington and Idaho where the class of timber is different and where it is possible to easily load a higher minimum than it is with the big timber on the coast.

Q. Well, do you employ the same type of equipment in Eastern Washington and Idaho that you do on the coast?

A. I am not familiar with the log equipment they use over there and I am sorry to say I cannot answer your question.

Q. Will you answer this question Mr. Kellogg, can you compare for the movement on your line the volume of log traffic moving under trainload rates and the volume moving under single carload rates?

A. The point to point movement statement which we have entered would furnish that information, but it would not show whether or not the logs actually moved on the trainload lot basis. That is they may not have actually moved. For instance we have a rate for twenty carloads but it doesn't follow that they have been handled in twenty carloads.

Q. Well you mean by that that they might have taken the rate but that the rate was applied by the car—I don't get your meaning on that?

A. Well, for instance, we have a rate on logs for ten, fifteen, or twenty carloads; we will say twenty, as we are speaking of that. In [fol. 130] actual practice where the carrier chooses to handle less than twenty carloads at its convenience the shipper receives the benefit of the twenty car rate, so that the shipment might be moved under the twenty car rate but moved in five or five or ten car lots, we will say, for an extreme example.

Q. Well, do you think that practice is followed to any extent?

A. I understand it is, yes. Take during the period of heavy log movement when it is almost impossible to give the loggers all of the cars that they think they ought to have, and which they might

require, it is impossible to keep them furnished with sufficient cars to ship according to the tariff.

Redirect examination.

Mr. Dudley:

Q. In that connection, Mr. Kellogg, the shipper, in order to obtain the benefit of the trainload rates, must order the trainload number of cars?

A. Yes sir.

Q. If he does order the trainload number of cars and the carrier is then unable to furnish them he is then entitled to the trainload rate although he may have received only five cars and only five cars moved?

A. That is it exactly.

Q. That is, I understand the affect of that tariff is such that it may be manipulated by the shipper so as he created a discrimination in his favor?

A. I think that could be very easily done, if he felt reasonably sure that an order for twenty would not give him twenty cars, he might not have logs enough to take care of more than ten, but he might place an order for the twenty and get the benefit of the twenty car rate.

[fol. 131] Q. In all cases it depends on the order filed with the carrier?

A. Yes, I believe that the billing carries a notation to the effect that if twenty cars were ordered and a smaller number furnished by the carrier through inability to furnish the number of cars required or ordered—That is put on the billing in order to protect them on the twenty car rate.

Mr. Henderson: On the Tacoma-Eastern isn't it your practice to apply the trainload rate irrespective of what the order for cars may be?

A. On the Tacoma-Eastern it is our practice to apply the rate as governing the movement as carried in the tariff.

Q. Isn't it a fact that practically every shipper of logs on the Tacoma-Eastern gets a trainload rate irrespective of the number of cars which he may order?

A. No—I am not, of course, familiar with the details of the practice down there but I would be inclined to say no; that if there was nothing on the billing to show that the man had ordered a required number of cars to bring him in under the trainload rate, a train auditor would return the bill for additional collection.

Q. You are speaking just from your own opinion but are you speaking from knowledge?

A. I don't know of any particular cases on the Tacoma-Eastern I could cite at this time, but I do know of cases of just that kind where there has not been the proper record on the billing to show that he ordered the full number of cars and the agent collected on the train-

load basis and the auditor returned it and told him to collect on the full——

[fol. 132] Q. Take where they order an average of ten or fifteen cars per day do they place that many every day?

A. Not necessarily. The shipper may place a standing order for whatever his requirements may be to bring him in under the benefit of the trainload rate.

Q. And you furnish him then whatever cars you are able to furnish under that kind of an order?

A. Yes sir. Under some operations a man may ship on an average of ten cars per day. He has possibly forty cars in his service. The shipments run along smoothly for a while and then there are several cars in bad order and delayed for repairs and it means that he doesn't get his regular allotment, and may be gets six or seven for two or three days and then these cars are repaired and he may get a bunch of fifteen or eighteen in one day; and in the meantime he has been loading six or seven or some amount under his usual allotment and he has been protected under the trainload rate owing to the carrier's inability to give him the number he required.

Q. Do you make it a practice to assign to any particular operator a certain number of cars for his service?

A. I cannot answer that.

Mr. Welsh: You say that your records are not in such a condition that you would be able to give us a statement of the extra amount paid to the carrier by reason of inability to furnish a trainload lot when ordered?

A. I don't know that I said that Mr. Welsh. I presume the auditing department has any and every kind of a record and if it was of moment and of importance enough to warrant the expense I pre-[fol. 133] sume the information you want might be secured, but I might say right here that I notice an idea on the part of the loggers' representatives to want and ask for a lot of statements. It seems to me that if I was the Commission I would figure in the cost of these statements and add them to the expense of handling logs in figuring the freight rate because they all cost a lot of money under present conditions.

Q. Yes, I know, and if you want to get argumentative, the loggers pay a lot of freight?

A. Well, not proportionately.

Q. Well now can you furnish this information, the expense where the logger—or the amount of freight that the logger has paid on carload lots, that is on individual carload lots where he was working under a tariff that permitted of trainload lots?

A. Now let me see if I get your point. There might be two rates for instance between two given points, one a twenty car rate and one a single car rate; you mean then what you want is a record of the shipments which move on the single car rate?

Q. Yes?

A. I think there is all kinds of information in the accounting department, yes.

Q. Now isn't it true that in every instance where the shipper has had two rates a single car rate and a trainload rate that he has never paid the single car rate?

A. Well, I hope that you are wrong. I am not in a position to answer that.

Supervisor Spinning: Would he have paid the single car rate if he had a single car shipment?

[fol. 134] A. According to the tariff if he hadn't ordered the trainload number of cars he should have paid the single car rate. And as I say I assume that he did.

Mr. Welsh: In other words, Mr. Kellogg, from your experience the trainload rate has simuly operated as a means of a rebate to the large shipper, hasn't it?

A. I wouldn't want to say that. Rebates are something we don't talk about any more. I don't like the word, but I will say that the trainload rate has been a preferential rate for the large shipper, in my opinion.

Q. It has worked out on your line that way right along?

A. I am giving you my opinion as to the practical working out. I am not qualified to answer.

Q. And it permits a shipper who has a trainload movement to take advantage of that as to scarcity of cars and in consequence reduce his freight?

A. Yes.

Mr. Welsh: That is all.

Mr. Henderson: You spoke about the statements being requested by the representative of the log shippers and that the cost of those should be added to the log rates. How much extra help do you put on to get out these statements?

A. Well, I will tell you Mr. Henderson, if you had to do with the railroad accounting department you would find that every time you wanted a statement you would get a little note from them saying that this statement will take ten days and cost $400.00. The figures run up pretty high and it makes you hesitate in asking for statements. I also know in connection with this hearing that we had a number of men assigned to the work of compiling the data requested [fol. 135] by the Commission and their expense alone run into a big item. Now you might say that we didn't hire extra help to work on those statements, at the same time these men in working on those statements had to stop something else. But don't get the impression that I was criticising you gentlemen for asking for the statements but I do want to offer the suggestion that you don't ask us for a whole lot of statements, because you know we have other things besides this log business to do and a lot of work.

Q. Well, about 65% or 70% of your business is the logging and lumber business?

A. That is relatively; if you mean tonnage and things like that all right. I wouldn't say that as to income.

Q. Your exhibit says that practically 60% of your loaded car traffic is log business?

Mr. Dudley: What do you mean, tonnage or revenue?

Mr. Henderson: Yes, tonnage.

Mr. Dudley: Tonnage only, you don't mean revenue?

Mr. Henderson: I mean what the exhibit says here 59 or 60%, that is tonnage.

A. Well, those exhibits that Mr. Greengard entered do show, I believe, that on a certain division 59% of the traffic of that division was logging, and for the balance of the state it shows, I believe, that 3.9% of the business was logging traffic, but it doesn't show that 59% of all of the State of Washington traffic was logging.

Q. It does show that more than 59% of the business of the entire state is logging and lumber products, doesn't it?

[fol. 136] A. I don't believe that statement shows the proportion of lumber and shingles and that sort of stuff.

Q. It does, however, show that on the Tacoma-Eastern Branches that practically 60% of the busines, or better, is logging business?

A. Well, whatever the percentage in the statement is, I don't know.

Q. And that the money consumed in getting out these statements is charged to the proper account so that it goes in against that business?

A. I don't know anything about the accounting.

Q. That is what I wanted to get at when you were speaking of the cost of getting out these statements?

A. I am inclined to think they have an account down there to which they might charge the cost of preparing the statements for the defense of Interstate and State Commissions' hearings, I don't know——

Q. So that you are simply making the suggestion that it costs the company something to get these statements out and it ought to be charged to the logging operations——

A. There is no doubt it costs something.

Q. I want to know what extra money it costs in case you had to get out these for this hearing?

Mr. Dudley: Now we have only time here, not eternity, I think I will object to it.

Mr. Henderson: The witness made the statement that——

A. It was my suggestion that you gentlemen ease up on asking for statements if you didn't think they were going to be of a great deal of value.

[fol. 137] Mr. Knott: I hand you a statement, will you kindly point out the rule in that tariff which permits you to charge carload rates when shipments move in less than twenty cars?

A. You mean trainload rates?

Q. Yes, trainload rates?

A. Rule 5, page 4, Milwaukee's G. F. D. 13825-A is the rule referred to.

Q. Read the rule for the record—read the portion of it which covers the point?

A. "It shall be optional with the carrier as to whether or not the specified number of cars constituting a trainload shall be handled in one or more trains."

Q. Then if there is any discrimination between shippers it is because the Milwaukee, themselves, elect to create the discrimination, isn't it?

A. No.

Mr. Balmer: In your opinion, as a traffic man, Mr. Kellog, is a trainload rate preferential only because it offers this means of subterfuge which was spoken of, or is the trainload rate in your opinion preferential as compared with carload rates for lower than carload rates?

A. It has been ruled by the Interstate Commerce Commission that rates may not be made in trainload lots on a lower basis.

Mr. Henderson: We object to the rule unless it is cited to find out if it is correct.

A. (Continuing:) "On a basis lower than for single carload rates," and we today carry no interstate rates for trainload lots on a lower basis than on a single car lot.

Mr. Balmer: Isn't it a fact that the publication of trainload rates on a lower than carload rates establishes a rate, that is the trainload rate, on a basis which few shippers are in a position to take ad- [fol. 138] vantage of?

A. That is my understanding, and I believe is the reason why the Interstate Commerce Commission adopted the principle which they have laid down.

Mr. Mount: In connection with the trainload rates has it come to your attention Mr. Kellogg, as Chief Clerk in the Traffic Department, that the Interstate Commerce Commission requires you to restrict your trainload rates for Intrastate traffic——

A. Yes, as I stated before we carried no interstate rates and in order to comply with the Interstate Commerce Commission's rulings, the rules are applicable on interstate traffic only.

Q. Does your tariff so read?

A. Oh yes, we carry no interstate trainload rates.

Mr. Henderson: Most of your logging business is done in trainload business, isn't it—5 to 10 cars?

A. I wouldn't call a 5-car train a trainload lot. However I am not qualified to testify in regard to the operations.

Q. I wanted to get at the point you testified to with reference to the preferential figures of it, wouldn't that question be controlled considerably by the manner in which the business is conducted; for instance, logging business is done and come out of the woods in trainload lots?

A. Well that would not offset or change the preferential feature. I offered my opinion as to trainload rates being preferential. The fact that they may be handled in trainload lots does not alter my opinion.

Q. It is easier and more economical for a railroad company to handle them in that way than it would be in separate cars?

A. As a traffic man I would say that that is theoretically true, and is probably the reason why some of these rates were made in trainload lots, but as to the actual practice I am not in a position or qualified to answer.

[fol. 139] Q. That is what I wanted to get at, in view of the statement that was made that it was preferential.

A. I gave you my opinion.

Q. And I wanted to get at what your opinion was, whether it based upon the cost of operation or was just an arbitrary proposition. Are you basing your opinion on what it cost the company to handle the business?

A. I don't believe my opinion indicated that I considered cost at all. I just quoted trainload rates being preferential and that they made lower rates for large shippers and recognized conditions which the Interstate Commerce Commission has repeatedly refused to recognize.

Q. You think car-load rates are preferential as compared with les- than carload rates?

A. I am with the Commission on that; the Interstate Commerce Commission don't seem to think so.

Q. You are putting your judgment up against the Interstate Commerce Commission?

A. Well my judgment on that may not be in conformity with the Interstate Commerce Commission.

Mr. Balmer: Is a string of 20 carloads of logs a trainload of logs in operation?

A. I am not an operating man, but I understand it is not, but I wouldn't feel qualified to answer that.

Q. When you speak of trainload rates being preferential to carloads rates, you mean to include with the term "trainload rates," any rate that is based on say, 10 or 20 car carloads, or any number of carloads less than a trainload?

A. I had in mind any rate which might be made for a number of cars on a basis lower than for one car, except double or tripple loads. That of course I don't include.

[fol. 140] Mr. Carey: All your interstate rates are in Eastern Washington?

A. Yes sir. They are all between Eastern Washington and Idaho.

Q. Are those rates all confined to one branch line or have you more than one branch line upon which you have interstate rates?

A. We have more than one with the interstate rates on, our Pend d'Oreille Line, from points there into Spokane, and they move through a portion of Idaho and we have rates from Plummer to Spokane, but it is in that territory where the interstate rates are carried.

Q. And the volume of that interstate *tariffic* over in Eastern Washington is negligable as compared with our entire logging moving movement in the state?

A. I believe so.

Q. You have no figures compiled?

A. No, it doesn't show the interstate movement, but I believe it is not nearly as heavy as the portion west of the Cascades.

Q. Without undertaking to figure it out exactly could you give us your best judgment as to abo-t how it would run in percentages?

A. No, I would not care to make an estimate.

Q. How long would it take you to figure it out?

A. Well, I could take and figure it out from the point to point movement which we had.

Q. Well you have the entire movement already figured out?

A. Well, that entire movement was for the State of Washington.

Q. Not including any interstate?

A. Well, the statement also included the Washington portion of the interstate haul to- but it threw out the Washington part of the haul. But as I recall it in gathering the data from which this state-
[fol. 141] ment was prepared we also secured the Interstate movement and if so it would be just a matter of figuring up what the interstate movement was and compare it with the state movement.

Q. When you get a chance will you look that up.

Mr. Dudley: What is the purpose of this?

Mr. Carey: I wanted to know how the figures run, I don't know what purpose it might serve, to tell the truth.

Mr. Dudley: I can't see the materiality of it. I shall object.

The Director: Unless it serves some purpose of the hearing I don't think we will require it.

Mr. Carey: Now your movement in Eastern Washington includes a part of the interstate movement which is entirely distinct and separate from the movement in Western Washington, that is, there is no logs moving between Western Washington, and Eastern Washington?

A. Generally speaking I should say there were none. I don't know at this time of any particular movement. Perhaps one of our operating men could tell that but I doubt it because there would be a mountain haul involved.

Q. There would not be any record of anything of that kind?

A. No.

The Director: Mr. Robbins, I believe has one or two witnesses that want to get away, could you make arrangements to call them out of order?

Mr. Robbins: I have discussed that with Mr. Dudley since, and I think I had better hold my witness over and not break into his case. I think I had better let him go ahead and finish.

Mr. Dudley: If the Commission please, the question was asked Mr. Dow, by one of the counsel as to the difference in the cost of
[fol. 142] turtle back bunks and the wood bunks. Mr. Dow had the notation that the turtle back bunks cost approximately $130.00 and the wood bunks approximately $15.00.

Mr. Richmond: Is that present prices or original cost prices?

Mr. Dudley: That would be I take it, the present approximate cost prices.

Mr. Richmond: Did you say that is present quotations?

Mr. Dudley: That is per car.

Mr. Richmond: And that includes installation upon the cars?

Mr. Dow: No, that is the cost of the bunk itself.

Mr. Richmond: It would approximate I suppose, about $5.00 per car to put them on. That is all.

W. E. Brown, a witness produced on behalf of the Chicago, Milwaukee and St. Paul Railway Company, after being first duly sworn testified as follows:

Direct examination.

Mr. Dudley:

Q. You are operating at the present time the Cowlitz, Chehalis and Cascade Railway?

A. Yes.

Q. You were formerly Superintendent of what is now the Willapa Harbor Branch, formerly the Puget Sound and Willapa Harbor Railway?

A. Yes sir.

Q. Over what period were you Superintendent over that road Mr. Brown?

A. For the period from the construction up to and including the major part of 1917.

Q. That construction was completed in 1915, I believe?

A. Yes.

Q. During that period did you keep any record or make any memorandum as to the cost of repairs to cars used in logging on that road? [fol. 143] A. Yes.

Q. What was the cost?

A. Eight and a fraction—just from memory I cannot give the fraction but I am positive as — the amount—8 and a fraction cents per train mile movement .

Q. Train mile or car mile?

A. Well in using the word train mile I refer to a loaded mile; the movement of the car under load.

Q. Per loaded car mile?

A. Yes sir.

Q. That covered the entire period that you were operating that road or the greater portion of it?

A. It covered the period, I think, of 18 months, the latter period.

Q. You are now operating the Cowlitz, Chehalis and Cascade Railway?

A. Yes.

Q. That road runs between what points?

A. It initiates at Chehalis and ends at a point 19 miles southeast.

Q. What is the principal business of that road?
A. Logging.
Q. Have you kept a record of your expenses on that road for the repairs of cars used in logging?
A. Yes.
Q. Have you a record—is this the document?
A. Yes.
Q. Will you state how much per loaded car mile that shows?
A. 12.43—12 and 43 one hundredths cents per mile.
Q. I notice an item below there of 11½, state what that is?
A. Well, the 12.43¢ represents the actual damage pro-rated against the car movement. The figure underneath which is 11.7 represents [fol. 144] the actual expense which is borne by the railroads. The balance represents the amount which was billed against the logging company for damages to equipment which we were able to collect.
Q. That is, the 12.43¢ represents what you were able to collect?
A. No, that is the total damage.
Q. And the 11¢ is what the railroad company bore?
A. Yes.
Q. What period is covered by that statement?
A. I think 13 months, a period of 13 months' operation from July 1st, 1920.

Mr. Dudley: We desire to offer that statement in evidence as an exhibit.
The Director: Any objections. Did you make any copies Mr. Dudley?
Mr. Dudley: I will file it and if the Commission desires it, I will ask leave to withdraw it to make copies of it.
The Director: All right.

(Marked Milwaukee's No. 8.)

Cross-examination.

Mr. Henderson:

Q. How long is that railroad?
A. 19 miles.
Q. How many miles of track have you?
A. Well, that 19 miles, approximately, represents the main line but it doesn't include the sidings.
Q. That is the reason that I asked you for the miles of track.
A. 20 and a fraction.
Q. And who is your principle shipper on that road?
A. The Chehalis Mill Company.
Q. That supplies more than 50% of your traffic, doesn't it?
A. Yes.
Q. About what per cent. of your traffic does the Chehalis Mill [fol. 145] Company furnish you?
A. I couldn't give you the exact figure; I think your statement of more than 50% would probably cover it.

Q. Do you think it furnishes as much as 75%?
A. No, I am sure it would not.
Q. Between 50 and 75%?
A. Somewhere in that latitude.
Q. Now do you haul any other business except logs?
A. Yes.
Q. What?
A. A little lumber.
Q. Then lumber and logs is racticaliy all of your haul?
A. Yes, we have diversified products; for instance, less than carload merchandise. We haul farm products; but the traffic is light this year.
Q. But taking lumber and logs together would you say that 75% was too large a percentage for lumber and logs?
A. No, I would not.
Q. It would be greater than that, wouldn't it?
A. Well, I am not prepared to say.
Q. When did you acquire this property?
A. In the latter part of October.
Q. What year?
A. 1920.
Q. Did you option it to the Milwaukee?
A. No sir.
Q. Isn't it under option now to the Milwaukee?
A. No it is not.
Q. And you say that you never did option it to the Milwaukee interest?
A. I so stated.
[fol. 146] Q. Nor the control of it?
A. Yes sir.
Q. Did you buy this in 1920 just for your own operations?
A. In connection with some associates I did.
Q. You stated that the principal amount of your business would be 75% or more lumber and logs?
A. Not positively, I stated——
Q. With reference to the revenue, would more than 50% of your revenue be from the business furnished by the Chehalis Mill Company?
A. I stated I thought so.
Q. Would 75% of your revenue be too large a percentage to say comes from the lumber and logging business?
A. I state probably around that, without positive knowledge.
Q. Was that road built primarily as a logging road?
A. I am unable to answer that question.
Q. Do you know when it was built?
A. Approximately.
Q. When?
A. I think it was in 1915.
Mr. Welsh: Is that a steam-road Mr. Brown?
A. Yes. Well I might ask your idea of a steam road?
Q. That is not a road then that operates by gasoline cars?

A. There is a gasoline motor passenger car operated over the railroad for passenger service only.

Q. But you have a steam engine for operating your logging cars?

A. Yes, we have two steam locomotives.

Q. Is that your own locomotive power or is that power furnished by the logging company?

A. The locomotives are the property of the railroad.

Q. Now isn't it a fact that the cost of maintaining your cars is greatly increased by the fact that you are not equipped with the [fol. 147] facilities for repairing those cars?

A. It is not. I might say that the cost of repairing cars on our railroad is much lower than on the lines that are cited to appear. For instance, the four lines represented.

Q. Is that your opinion?

A. No, it is not my opinion, it is based upon knowledge of the facts.

Q. Then your roadbed is not in very good condition is it, Mr. Brown?

A. Well what do you term condition; what standard do you go by?

Q. You are a railroad man, you should know, you have had sufficient experience to know what good is.

A. There are various standards of construction for branch and main lines. I think I know what a railroad is, and I would say that I think our track is slightly above the average for a road of its class.

Q. Who does your car repairing?

A. The railroad.

M. Nicholson, a witness produced on behalf of the Chicago, Milwaukee and St. Paul Railway Company, after being first duly sworn, testified as follows:

Direct examination:

Mr. Dudley:

Q. State your name please.

A. M. Nicholson.

Q. What is your occupation,

A. General Manager, of the Chicago, Milwaukee and St. Paul Railway Company.

Q. I wish you would describe generally and compare the transportation of logs with the transportation of other commodities.

A. As to the peculiar features involved in the logging operation you have in mind?

[fol. 148] Q. Yes.

A. In the first place the equipment ordinarily designed for the traffic must be arranged for. Usually such equipment cannot be used in other than logging service. There is commonly a car

equipped with bunks for handling logs that may be used for the movement of lumber or possible a car of poles, but such movement is not frequent. There is very little of it compared with the volume of log traffic. The movement on the car is only one way, loaded. Very seldom is there an opportunity to furnish a load in the reverse direction, so that you have a double mileage for the distance hauled of your net traffic. It frequently requires the assignment of special crews for handling the log business on account of the logging operations being scattered to some extent, requiring a great deal of switching service in gathering up the logs from the various shippers.

Q. Is that greater than for other commodities, speaking generally?

A. Yes I would think so. The logs usually originate in a comparatively small area and several operations are frequently found, each contributing a small number of cars daily which requires the assignment of special train crews for the movement of such business. It is intermingled with other revenue business occasionally but a very large per cent of our logging operations are handled by special crews assigned for logging operations. The cars in that service we find are subject to a great deal more abuse than almost any other class of traffic on account of the manner of loading the cars and the manner of unloading the cars. I have nothing further as to the general nature of the movement of logs that is different from any other class of traffic. I would like to add this, Mr. Dudley, that in assigning cars for logging service we find that it is not possible to make the average mileage anywhere near comparable with [fol. 149] any other class of traffic. That is by reason of the fact of having set aside what we consider a surplus of equipment in order to take care of the regular operation of logging. Now I have some information which would indicate the comparison of mileage of logging flats with other freight cars, for four months, September, October, November and December, 1920, on the Coast Division, of which Mr. Dow is Superintendent, and as previously testified. All cars for the month of September averaged 38 miles per day, October 37.6 miles per day.

Mr. Dudley: That includes freight cars only, it doesn't include passenger?

A. No sir, all freight cars. November 45.6 miles per day, December 52 miles per day. Now comparing with that the same period and included in the averages for all cars we have segregated the average miles per day for cars assigned to the logging service, and in the month of September, the average was 6.39 miles per day. October 10.13 miles per day. November 9.66 miles per day and December 2.57 miles per day. I think it proper to mention in connection with the general operation of the logging traffic the comparatively small mileage per car per day which we get out of the equipment assigned to that service. Now I might also add that the daily mileage of the locomotives that are assigned to the logging service is far below that of the ordinary locomotive that is engaged

in commercial traffic. The locomotives that are assigned to handling a logging operation are traveling switch engines, you might term them. I might add a little more to this statement as to the average car miles, and give them for the Milwaukee System as a whole.

Mr. Dudley: If you would?

A. For the month of September, 1920 the average for all freight cars was 36.4 miles per day. October 37.1 miles per day. November 31.4 miles per day. December 23.9 miles per day.

[fol. 150] Q. Now in your logging operations are you able to take care of an operation in regard the number of cars per day that the shipper proposes to ship?

A. We are not. In the first place it requires from 4 to 5 times the number of cars in the service that the shipper wants to load daily. The average is nearer 5 than 4. That means that in an operation of 20 cars loading per day there would have to be between 80 and 100 cars assigned to that service. Now those cars are frequently — bad order. There are interruptions in the movement from the loading point to the unloading point. There are interruptions at the unloading point. There are interruptions on the tracks where the loggers load their cars, influenced by the railroad's difficulties or the logging company's difficulties. Then there are holidays and breakdowns and other difficulties that cannot always be forseen, so that the supply of car for logging operations cannot be considered always regular.

Q. Now, in a general way is the expense of such logging operations—transporting that class of freight compare with your expense of transporting other freight, speaking just generally now, I am not asking for details?

A. The expenses is considered much greater in the handling of logging operations than in general traffic. I would like to say just a few words at this time.

Mr. Dudley: Take a free hand.

A. If the Commission please, I would like to make a general statement about railroad statistics. I have been following them for a great number of years. I have attended mum*b*erous hearings such as this and if you will permit me I would like to say a few words in connection with railroad statistics and how they are made up.

The Director: All right.

[fol. 151] A. (Continuing:) In the first place railroad accounting has been the subject of a great deal of thought on the part of those that know and on the part of those that ought to know. At least we have federal laws which have laid down and prescribed the principles under which all railroad accounts shall be handled. There is not a penny's worth of labor or a nickle's worth of materials but what the rules of the Interstate Commerce Commission prescribe how it shall be shown in railroad accounts. The purpose of that is to develop a unit of cost, recognized very generally as the cost of transporting primarily the net ton one mile. And the railroad is built for that purpose and all of the investment and expense of opera-

tions is to determine what it costs to move one net ton one mile. In arriving at this figure they have excepted the cost of moving a gross ton and use as the basis the cost of moving 1,000 gross tons one mile. That is prescribed by the Interstate Commerce Commission because all of the movement of your company supplies your coal and your gravel and the movement of domestic cars all have its bearing on the movement of a net ton one mile. So the basis which has been prescribed in order to get away from fine decimal points has been based on the cost of moving 1,000 gross tons one mile. The figures that enter into arriving at that cost involve statements and calculations from a great many sources. Any of you gentlemen could take any one of those statements and by reason of probably not understanding how they were prepared or for what purpose they were prepared might ask a railroad officer 1,000 questions and he could not answer and many that he could answer, but in asking questions about railroad statistics we recognize that you embarrass almost any railroad officer whether he be an accounting or operating man or whoever he might be, but when it is all summed up you have operated your railroad at a given cost, such cost determined by the laws prescribed the manner of accounting. You have moved so many thousand gross tons in doing so; or in other words, you have spent [fol. 152] your money and bought so many thousand gross tons. You can very easily determine your cost per thousand gross tons, and that is the real foundation of all of your railroad accounting, to determine what that cost is. Now you can ask any number of questions about the cost of painting a car, the cost of moving a single car, or the cost of any train load operation. It is difficult to figure up just what that individual cost for a single car might be, because your whole structure is built up by the handling of your traffic that moves on that railroad, and each commodity must bear its share of the total business movement. Now for that reason it is difficult to convince you gentlemen that we are justified in charging to a logging operation some of the items which we put in. You can very easily say that it does not take another Superintendent to move an extra train of logs, but the Superintendent, the traffic department and the accounting department, and all of the other departments of the railroad must have their expenses allocated to the various kinds of traffic that move in the various operations. Now I have since coming here prepared some statements——

Mr. Dudley: I have some statements that I wish to put in before you put in those—preliminary to those.

Q. Now you had loaded cars weighed for the purpose of determining the weight and also scaled for the purpose of determining the number of feet on each car for the purpose of determining the average loading and the average weight?

A. Yes.

Q. I hand you a statement and ask you if that is the statement that you have referred to?

A. For test purposes during the month of September 1920 we

picked at random on the West Coast 147 cars and had them weighed on railroad scales in order to check the actual weight against the board measure feet and to determine the average weight per foot of the various kinds of lumber we were handling. The 147 cars averaged 7,826 feet per car. The average net weight per car was [fol. 153] 64,251 pounds, and the average weight per foot of lumber was 8.21 pounds.

Q. You spoke of lumber, was that logs?

A. I beg your pardon, it was logs.

Mr. Dudley: I will offer this statement in evidence.

The Director: Any objections: no response. It will be admitted.

Supervisor Cleland: Is that the one entitled actual weight of log shipments in the State of Washington?

Mr. Dudley: That is the one. I thought there was a copy of that included in the papers I gave the stenographer. This copy I have in my hand is my office copy and the averages were carried out by myself here in lead pencil. We will offer this particular copy in evidence.

(Admitted and marked "Milwaukee's Exhibit No. 9".)

Mr. Dudley: You receive monthly reports showing the operating costs on each division, do you not, as prepared in accordance with the Interstate Commerce Commission rules?

A. Yes. All divisions.

Q. Did you prepare a statement showing those monthly costs for the year 1920 by months?

A. Yes, for the Coast Division, Bellingham Division, and Olympic Division in Washington, and the Idaho Division in Idaho and Washington.

Q. This shows the transportation costs, the total operating costs on each division in each month during the year 1920. That is the Idaho Division, Coast Division, Bellingham Division and the Olympic Division?

A. Yes.

Q. And is taken from the statements which are sent out monthly? [fol. 154] A. Yes. These figures are the figures which are presented to the Interstate Commerce Commission and cover operating expenses. Now they don't include taxes or any fixed charges or interest on bonds. They simply cover the bare operating expenses; the same figures which you gentlemen see printed monthly by the Interstate Commerce Commission. This is reduced to the operating division. The figures that are published by the railroad as a whole are made up from the figures for each division, but for the information of the local officers of each division and of the officers in charge of districts, who are responsible for division operations the figures are prepared for each division separately, and I want it understood that they do not include taxes, interest, or any fixed charges.

Q. These figures represent the cost of moving 1,000 gross tons one mile?

A. Yes sir. The average for the entire division by months.

Mr. Dudley: We desire to offer this statement in evidence.
The Director: Any objections; No response. It will be admitted.

(Admitted and marked Milwaukee's Exhibit No. 10.)

Mr. Dudley:

Q. Now that is apportioned Mr. Nicholson, on all freight?
A. Yes.
Q. It would not include log traffic where there is an exceptional cost of repairs, that would simply be merged in the whole there?
A. This includes all of the freight traffic handled and divided against the total expense chargeable to freight only. I should have mentioned that before, that this represents the total average cost per thousand gross ton of charges allocated to freight only. Now the [fol. 155] total operating expenses of the railroad is first divided between passenger operations and freight operations. The division between the two separates branches of the service is made directly, where the charge can be allocated directly to passenger, such as a ticket agent, and where the charge can be allocated directly to freight, such as a bill clerk in the freight office or a warehouse officer, but where the charge is one that divides between the two services then it is apportioned on two or three different bases, which have been prescribed by the Commission, the principles among which is the train mile. Your track necessarily is for both passenger and freight service. The rule for dividing the maintenance of way and structures where the service is divided between freight and passenger business has been on the train mile. There is some common expense that can be divided on a fuel basis, some that may possibly be made on some other division, but they are all on a division which is prescribed by the Interstate Commerce Commission rules. These charges are arrived at by taking the total expenses chargeable to freight for operation in which the total gross ton miles are divided, which produces this average.
Q. Now as I understand it, Mr. Nicholson, owing to the exceptionally heavy cost connected with log transportation the cost of log transportation would run higher than this general average as shown by these statements?
A. It would run considerably higher for the reason that most logging operations are conducted on branch line territory and the volume of traffic is not great. The cheapest operation we have is where the volume is the greatest. That is on your main line, where your feeder lines produce the traffic, and have thrown it on to your main line, where your operations can be carried on in greater train loads, which reduces your average cost per ton where the volume is greater.
[fol. 156] Q. And where you have excessively — costs like the cost of repairing cars used in logging operations that would be a cost which would not be reflected in this average statement?
A. I didn't get that.
Q. I say, where you have exceptionally heavy costs like repairing

logging trucks that would tend to bring the cost of operation of logs higher than this average?

A. Yes, taking that one item, I think I have some figures on that. Freight train car repairs the year 1919 for the State of Washington showed an average for all cars of 3.6¢ per loaded car mile. The average for the same year in State of Washington for cars assigned to the logging service averaged 9¢ per loaded car mile. The excessive cost of the log car is absorbed in the average for the total and these figures in the exhibit mentioned, represent average costs.

Q. Now also the fact that your revenue mileage in the logging traffic is less than in your general traffic would tend to bring the cost of your logging business proportional-y higher than your average business as shown here?

A. The cost of the logging business is much in excess of the average by reason of the fact that it is carried on principally on branch lines where the traffic is light, where the business is picked up with considerable expense in the way of terminal expense for delay to your equipment; excessive switching charges in placing the empties and gathering up the loads and on lines usually where there is no through business, which would help reduce the average for the local business that is picked up on the line.

Mr. Dudley: I believe I have not offered this exhibit in evidence yet. We will offer this in evidence as Milwaukee's Exhibit No. 10.

[fol. 157] The Director: Any objection: No response. It may be admitted.

(Marked Milwaukee's Exhibit No. 10.)

Mr. Dudley:

Q. No- Mr. Nicholson, have you prepared any statement using the cost of operation as shown in Exhibit No. 10 with the tariff rates as shown in the sheets introduced by the Commission's Exhibit No. "A," in Exhibit No. 9, for the purpose of showing whether or not the existing rates are compensatory, or whether at the existing rates these logging operations are carried on at a loss?

A. I have.

Q. Will you produce some of those and explain them?

A. We realize that any figures which we would present showing the cost of the logging operations would be subject to attack. We recognize that there can be no legitimate attack on the average cost of doing business on a division because your expense for running the division is so much. You handle so much business. Now your unit of comparison is the cost of moving 1,000 gross tons. Now those are figures that we cannot get away from. The average fluctuates more or less according to volume in one month compared with another according to emergency operating expenses that might occur in one month and not in another, but nevertheless you have been required to spend so much to haul so much business. Now we took just as a few examples some actual operations that occurred durin*t*

the month of November 1920 and Mr. Dudley, I believe, has reserved the right to prepare similar statements for as many logging operations in the State of Washington as the Commission or you gentlemen may desire. We had an operation in the month of November between Stillwater and Everett a distance of 29 miles where the rate is $1.56½. Now during that month we handled 1,139 cars. The average load per car was as indicated in a former exhibit, ap- [fol. 158] proximately 33 tons. The weight of the car is an average of about 18 tons. Now in that load direction of one car we would have 51 tons. In the eastern direction we haul that same gross weight back empty of 18 tons, or your round trip tonnage of the car would be 69 tons. Extending that by multiplying it by the scale mileage of 29 miles times the number of cars handled produces the gross tons involved in that one particular movement of 2,279,139 gross tons. Now the average cost for the coast division for the month of November as shown in this statement here is 9.56 for each 1,000 gross tons handled. Therefore your cost of moving the gross tons involved in this log movement of 2,279,000 gross tons times 9.56, representing the cost per thousand gross tons, gives us an expense of $21,787.24 for that movement. Now the revenue derived from 1,139 cars—taking the average of 7,827 board measure feet per car, which is a great many of you logger- will claim is high, I am sure, it is considerably in excess of our minimum—shows 8,913,814 feet hauled on those cars. Your rate is $1.56½ for that distance which produces a revenue of $13,950.41 as against an expense of $21,787.24, or a net loss of $7,836.83 on that operation.

Mr. Dudley: I offer in evidence that copy of that statement.

Mr. Welsh: What movement is that on?
A. The Everett Branch.

The Director: Any objection: No response. It may be admitted.

(Marked Milwaukee's Exhibit No. 11.)

Mr. Dudley:

Q. What is the next one you have?
A. The next operation we have is between Kulshan and Bellingham on the Bellingham Division, a 25-mile haul; 432 cars handled, a rate of $1.64½ per 1,000 feet is the same calculation as gone through with in each instance which I mentioned, but the cost of handling 432 car loads of logs was $7,107.30 and the revenue, based [fol. 159] on the same average load per car, as was mentioned in the former exhibit, was $5,560.10, a net loss of $1,547.20 on the 432 cars.

Mr. Dudley: We will offer that statement in evidence and ask it be marked as Milwaukee's Exhibit No. 12.
The Director: Any objections: No response. It will be admitted.

(Marked Milwaukee's Exhibit No. 12.)

A. The next operation is one on the Tacoma-Eastern, known as Camp 2. Near Mineral the distance from Tacoma being 45 miles. There were 214 cars handled during the month of November. The rate is $2.65½ per 1,000 feet, the cost was $4,547.84 and the revenue at the $2.65½ rate was $4,447.12, making a net loss in that case on the 214 cars of $100.72.

Mr. Dudley: We will introduce that statement in evidence and ask that it be marked and referred to as Milwaukee's exhibit No. 13.

Mr. Henderson: Is that from Mineral to Tacoma, Mr. Nicholson?
A. It is from Camp 2, which is near Mineral.

Mr. Henderson: It is nearer Reliance.
Mr. Robbins: Do you want to change this Exhibit from near Reliance instead of near Mineral?
Mr. Dudley: That is nearer Reliance, Mr. Robbins.
Mr. Dudley: Mark it near Reliance instead of near Mineral.

(So marked.)

A. The next operation we have is between Independence and Preachers Slough a distance of 36 miles where the rate is $1.87½; that is on the Grays Harbor Line. We handled during the month of November 576 cars with a gross tonnage of 1,447,784 tons and the cost was $13,670.80. The revenue on the 576 cars at the $1.87½ rate was $8,450.62, or a net loss of $5,420.18.
[fol. 160] Mr. Dudley: We desire to offer that statement in evidence as just testified to and ask that it be marked Milwaukee's Exhibit No. 14.
The Director: If there are no objections it will be admitted.

(Marked Milwaukee's Exhibit No. 14.)

The Director: Try and see that copies are furnished to all of the parties.
Mr. Dudley: I will endeavor to do so.

A. The next statement prepared was for operation between Twin River and Port Angeles a distance of 30 miles. During the month of November we handled 1,206 cars at a cost of $16,199.04. the revenue on the 1,206 cars was $17,129.97 which produced a gain of $930.93. I may say that the costs for November on the Olympic Division are less than the average for the year. Using the average for the year the slight gain in this report would have probably been a loss.

Mr. Dudley: We offer this exhibit as Milwaukee's Exhibit No. 15.
The Director: If there are no objections it will be admitted.

(Marked Milwaukee's Exhibit No. 15.)

Mr. Dudley: The exhibits which I will prepare if the Commission will give me their consent to prepare and file, will carry out the actual operations from each station covering the same rates in a

similar manner so that the operating costs based upon these figures here, and revenues, will all appear, and it will appear whether they were operating at a profit or loss. Mr. Nicholson, did you prepare another statement for the purpose of showing the cost of operation on another basis on an imaginary operation of 30 mile haul?

A. I did, and I presume that anybody that is acquainted with railroad operations could prepare a similar statement if they would [fol. 161] take into account the more important items that are involved in operating a railroad.

Q. Turning back to these other statements Mr. Nicholson, which have been introduced in evidence, they would not contain any factor covering the investment cost or what is generally called overhead charges.

A. They do not include any fixed charges such as interest on bonds or any interest on the investment or any taxes. They are not included in the operating costs as published.

The Director: Does that include depreciation?

A. Well there is a slight depreciation accounted for on equipment only, nothing for buildings or track or anything in fact outside of the equipment, and that is at a very low rate; I think around two or two and a half per cent. on equipment.

Mr. Dudley: Now explain that other statement Mr. Nicholson.

A. Anticipating that those representing the logging interest would want to say something in regard to our various statistics which we introduced here, the question of whether certain items of expense should be included to illustrate the cost of handling a car of logs, I prepared a statement that approximates only the cost of a 30 mile typical log operation, where it is intended to ship approximately 20 cars per day. It would require for such an operation at least one engine and at least 80 log flats and a caboose; I don't think anybody could say that it could be handled for less or with less equipment.

The Director: How many log flats?

A. 80. We would be perfectly justified in charging interest on the equipment that is assigned exclusively to a logging operation. We have estimated the engine at $30,000. We might have one in the service that cost $30,000 but it would take $40,000 to duplicate it at least. This engine preforms the service of a $40,000 engine today [fol. 162] and we have shown it as $30,000. We have charged those 80 cars at $2,000 per car; they are just as good as the ones you pay $2,500 to $3,000 for today, but, 2,000 is a reasonable estimate; and the caboose at $1,500. I believe that one railroad in this territory is buying two cabooses new and paying about $4,500 for them. That produces an investment in the engine, cars and caboose of $191,500. We would be justified in charging interest on that investment at 6%, and 1/12 of 6% on $191,000, to get the monthly cost, would be $957.00. The log haul is 30 miles. Therefore 30 miles of track would have to be taken into account and eliminating the equipment and taking a very low average cost per mile or investment per mile for right-of-way, track, bridges etc. and we have shown it at $25,000 per mile—I doubt whether it would be possible to build a railroad such as we use to haul our log traffic on for twice the amount

mentioned in this estimate—but at that figure it produces us $750,000 of investment in road. We have assumed that of that trackage ¼ of it is devoted to the log service and the other ¾ to general commercial business, and figuring 6%, on ¼ of 1/12 of that produces $1,250 per month interest charge, which would be allocated to the log service. Taxes on $941,500 which represents the combined investment in track and equipment, and using a very low rate of 1%, taking ¼ of that chargeable to the logging service brings the ridiculously low tax of $262.00. I think it should be much higher. The operation, the wages of train and engine crews approximate $45 per day. In many operations we have it is considerably in excess of that for the conductor, engineer, fireman and the two or three brakemen, as may be required, but that is a total cost per month per crew of $1,170. We maintain track with four section crews, an average of 5 men each and taking only ¼ of their expense it would amount to $1,040, per month. In that distance of 30 miles we probably [fol. 163] wouldn't have any agent at one station and maybe an agent and an operator at another station. Frequently we have our station force closer together han that, but taking ¼ of such limited number of station officers would make the monthly station expense $183. We have a log scaler attached to the operation whose salary expense would be $102. We have fuel and supplies for the one locomotive and estimating on the basis of coal the expenses would run approximately $50 per day. They would burn 10 or 11 tons of coal, and its equivalent in oil would not be any cheaper. The operation for 26 days plus lubricants and other supplies required makes the monthly charge for fuel and supplies $1,300. Our average cost for repairs for steam locomotives runs from 30¢ to 45¢ per mile. I have used 30¢. That mileage produced by an operation of that kind is 60 miles per day not taking into account the mileage for switching at either terminal, or any other place but just the bear track mileage produces $468, as the cost of repairs to the locomotive. The repairs to cars—we are using the cost as submitted in one of the former exhibits wherein we worked out the average cost per loaded mile of log flats, which I believe was 9¢ per loaded car mile. The 20 car operation for 26 days per month, 520 cars, and a haul of 30 miles produces a car repair expense of $1,404 for the month. We have added $100 for supervision. There are a great many other expenses which properly belong to an operation of this kind but we have just picked out a few of the prominent out of pocket expenses in making this example. That makes the total cost for the month for such an operation $8,344. Now the revenue on a thirty mile haul, twenty cars per day, with the average load as previously explained, produces a revenue of $7,670.00.

[fol. 164] Mr. Dudley: Will you explain—you have used your rate there $1.88½, will you explain where you got that rate?

A. The $1.88½, I think, is our rate for a thirty mile haul.

Q. It is the average rate, isn't it found by the Commission for a thirty mile haul?

A. It is the Chicago, Milwaukee & St. Paul rate west of the Cascades for a twenty-six to a thirty mile haul.

Q. That is according to Mr. Calderhead's statement?

A. That produces a revenue of $7,670.00 or a loss on the direct out of pocket expense with no consideration whatever for interest charges or fixed charges or general expense, which takes in all of your overhead and management, and we have a loss on the operation of $674.00. Now this statement, gentlemen, is just an example, and we think we can defend everything that is in it. It is not an actual operation, but from our knowledge of costs it is far below what the actual cost would be had we an operation to fit that particular movement.

Mr. Dudley: We would like to offer this statement in evidence as Milwaukee's exhibit number 16.

The Director: If there are no objections, it will be admitted.

Admitted and marked Milwaukee's exhibit No. 16.

Supervisor Cleland: How many locomotives and cabooses and log flat cars have you purchased in the last five years for use on your lines in Washington?

A. I don't believe we have purchased a single steam locomotive out here, unless we have acquired some from lines which are now subsidiary lines.

[fol. 165] Supervisor Cleland: How many cabooses have you purchased in the last five years?

A. I don't know of any that we have purchased.

Q. How many flat cars for use in hauling logs?

A. I could not say as to that.

Q. Have you purchased any?

A. I don't know. I know that we took over a lot of equipment from lines which have been acquired within the last five years.

Supervisor Spinning: Do you manufacture some of your own cars?

A. We have manufactured a number of them in the past. The last five years have not been years that we could buy cars or make any.

Supervisor Cleland: What could you buy a flat car for in 1913?

A. I don't know.

Q. I see you have flat cars in here at $2,000.00 apiece?

A. Yes.

Q. They didn't cost one-half that much five years ago, did they?

A. I would think they would cost a little better than half that. At that time, I remember, we were paying around $900.00 to $1,200.00 per car, dependent upon the capacity and the manner of building, if you put a steel center sill under it.

Q. I have before me an exhibit introduced in a former log case which I am citing, and I find that similar cars were purchased by another road for $840.00 apiece, seventy-three cars, and I find their figures also differ. I was just wondering if you were applying war [fol. 166] prices to all of your items or whether you were applying pre-war prices?

A. No, I stated that to buy a flat car today you would have to pay, at least, $2,500.00. I have that figure from the Pacific Car & Foundry Company, who were building some cars just recently. I also

have a figure on the caboose where one railroad has recently purchased fifty, I think, that the cost was 4,500.00 each.

Q. Well, admitting that they cost $3,000.00 today, it has been the practice of this Commission to refuse to permit a return upon values based upon war prices, and our valuations are all based upon the average prices prevailing before the war and before the abnormal prices. Now you have admitted that your purchased some of this equipment prior to the war and are asking a return upon an investment based upon pre-war prices; now that would hardly be fair, would it?

A. I think so, Mr. Commissioner, for the reason that we are setting up an example showing what it would cost to handle a logging operation today. Now, these cars may be two years old, they may be five years old, but a car is kept in operation and the continual renewal of the parts that fail, and so far as service is concerned it is just as serviceable as a new car.

Q. And all of these items you have just mentioned are included in your statement as a part of the expense either as depreciation or as repairs and maintenance?

A. I have included the investment in the equipment, which I believe would be the only thing involved.

Q. Well, you have included——

[fol. 167] Mr. Dudley: Do I understand, Mr. Supervisor, that you understand that depreciation is included in the repairs?

Supervisor Cleland: No, I don't. He says that he has allowed depreciation on that equipment for something over 2%?

A. Not in this statement, Mr. Supervisor.

Supervisor Cleland: Well, have you allowed any?

A. No sir, no depreciation whatever.

Mr. Henderson: You are not going to get any depreciation in this operation according to this statement.

Mr. Dudley: We admit that that loss is greater than shown there.

Supervisor Cleland: Why did you omit depreciation in this one and include it in the other one?

A. This is supposed to represent the direct expenses for a logging operation of that nature. I did state that in our figures we produced the average cost of the operation including a slight depreciation for equipment only. Mr. Kuykendall asked if the operating statistics included depreciation and they do include a slight depreciation for equipment.

Supervisor Cleland: Is that included in this statement?

A. Not in this statement.

Q. Why is that not a proper charge in this statement?

A. It probably would be. There are a great many items I could put in that statement but these are the more prominent ones which are more directly involved in that logging operation.

Q. 2% on the entire investment here is a considerable item, isn't it?

A. I should not think it was.

Mr. Dudley: Is there any other item that you had in mind Nichol-
[fol. 168] son? Oh, I think you had a statement—no you have made you- statement I believe as to the length of time of the daily haul of the log equipment as compared with the ordinary equipment—you made that statement I believe?

A. Mr. Kellogg gave the average length of haul of each operation. I gave the average miles per car per day for the different divisions.

Mr. Dudley: Unless you have something further that you wish to speak of that will close my direct examination.

Mr. Balmer: In connection with this statement that was last introduced in evidence, have you shown anything at all for yard expense?

A. Nothing at all.

Q. Have you shown anything for car inspection?

A. Nothing, except as may be involved in the repairs to logging cars.

Q. Does that include the wages of the car inspectors, who are not car repairers?

A. I have taken the average cost per loaded car mile for the expense of upkeep only; it does not include the usual yard inspection except that at some of our loading points and at some of the smaller terminals where log cars are running in and out the inspector is also the repairer and his expenses chargeable to repairs is included in the average of nine cents per mile.

Q. Is it possible as a matter of proper railroad operation to handle logs without any yards at all?

A. Not where they move through a terminal. Now a terminal is a [fol. 169] dividing point for train operations, as a rule. The road crew brings that train into the terminal and the yard crews break up the trains and make up the train if it is going on beyond, but if the loads are to be unloaded at the terminals the yard crews handle them. At the terminal like Tacoma, our yard expenses for handling logs is a considerable item because our log business involves quite a percentage of the total cars handled in the Tacoma terminals, particularly on account of that being our principal repair point. And there is a great deal of switching involved in switching bad order empty log flats as well as some loaded log flats to and from repair tracks as well as spotting them at the points where they unload.

Q. And does this item of repairs go into the thirty cents per mile including everything ordinarily chargeable to engine house expense?

A. The repairs include only just the actual repair account. The items of fuel and supplies shown as $1,300.00 is intended to cover the fuel and supplies in the way of lubricants, the waste and the tools and the handling of the engine. I just estimated it as $50.00 per day which I think is low.

Q. You have not included anything here at all for casualties?

A. Nothing whatever.

Q. Nothing for general expenses?

A. Nothing.

Q. Nothing for law expenses?

A. No sir.

Q. You have not included anything for traffic expense?

A. Nothing at all.

Mr. da Ponte: What about the maintenance of way and structures?

A. That is included under the second item of operation there, wages of track force. I just assumed that on--third of the ordinary [fol. 170] maintenance crew would be chargeable to a logging operation, having in mind the Tacoma-Eastern or the Willapa Harbor or the Everett Branch.

Mr. da Ponte: What about material and ties——

A. No maintenance of tracks.

Mr. Balmer: No renewals?

A. No.

Mr. da Ponte: That maintenance of way and structures is the heaviest item?

A. Yes, it is a very heavy expense.

Q. You have nothing for that in here?

A. No, as I said in the first place these were the more prominent items that would impress any of these gentlemen that run logging railroad. That is what they would see first.

Q. Now did you look up to see what your taxes were per mile?

A. No sir. That is a figure that I was told since this statement was prepared, was exceedingly low.

Q. About one-fifth isn't it of what the actual is?

A. I am assuming one-third of one per cent chargeable to taxes.

Q. But your one per cent is only 20% of what the total state taxes is, to say nothing of what your federal tax is, hardly one-fifth?

A. I am not familiar with the statement that would show the taxes per mile. That would include the items which are covered in this statement here, of just the engine and a few cars and the caboose and that little piece of track.

[fol. 171] Mr. da Ponte: You were showing your total revenue of $7,670.00, your taxes in this state run to about 12% at the present time, I think?

A. 12% on the investment.

Q. Now of your receipts?

A. Oh, 12% of the gross receipts; that might be the better figure to use, that is on the gross earnings.

Q. Well, you have given you- gross earnings there as $7,670.00, compare that with what you have allowed for taxes to show how adequate that figure is?

Mr. Dudley: Did you prepare a statement of what rates, in your opinion would be necessary to afford a compensatory return in the logging service?

A. Yes, I have prepared a memoranda based somewhat on what these operating costs have developed since we have been going particularly into the logging operations.

Q. Will you read that memoranda into the record?

A. A rate which in my opinion should be the least to consider is based on 1,000 board measure feet and with an average loading

of approximately 8,000 feet per car, which would be as follows for varying distances: From one to ten miles $2.50 per thousand, producing a revenue of $20.00 per car; from eleven to twenty miles $2.60 per thousand, producing a revenue of $20.80 per car; from twenty-one to thirty miles $2.75 per thousand, producing a revenue of $22.00 per car; from thirty-one to forty miles $3.25 per thousand, producing a revenue of $26.00 per car; from forty-one to fifty miles $3.35 per thousand, producing a revenue of $26.80 per car; from fifty-one to sixty miles $3.50 per thousand, producing a revenue of $28.00 per car. Now in arriving at these figures I have in [fol. 172] mind that your investment, that your terminal expense and many other expenses involved in the logging operations are approximately the same for a five mile haul that they are for an eighteen or twenty mile haul. The time of your crews engaged in the operation are approximately the same and for that reason from distances for one to twenty miles the rate is almost the same, with very little difference up to thirty miles, that being about the distance you could expect one crew to handle any operation within pro rate hours for wages. When you get beyong thirty miles then it produces an operation which is carried on partly in overtime hours where we are required to pay a bonus to the employees, which accounts for the jump of forty cents per thousand, from the thirty mile haul to the forty mile haul. Your forty mile rate varies very little up to a sixty mile haul.

Mr. Dudley: In your judgment Mr. Nicholson would it be necessary to have rates approximating these to be compensatory and leave the railroad company any return upon its investment?

A. I question whether these rates would give any return on the investment. They would not any more than cover the average cost of operating expenses.

Q. Including fixed charges?

A. Not including fixed charges.

Q. Or taxes?

A. No sir.

Q. Now the tariffs here on file are of three kinds, they show a single carload rate, and there is a distance tariff, which is apparently [fol. 173] a single carload tariff, and a trainload tariff, the trainload tariff running from ten to, I think, as high as thirty cars. I will ask you as to whether or not a trainload tariff in your judgment is justifiable, and in that connection what number of cars you would consider the minimum number which could be included in a trainload at a time?

The Director: I think before you answer that we will take a recess for five minutes.

After recess all parties present as before; Mr. Nicholson on the stand.

A. I don't agree with some of my colleagues possibly in having an opinion contrary to the Interstate Commerce Commission's rules, but I do feel that a trainload rate is justified for operating for these

reasons, but that trainloads should be a minimum of at least thirty cars. It is a principle of commercialism that has been followed for years that buying in quantities justifies a lower price, that is why you buy a box of cigars instead of one at a time. We have not the trainload rates with the carload rate, as distinguished against the less than carload rates. That seems to be approved by the Interstate Commerce Commission wherefore operating reasons you can handle logs or any other commodity that moves in quantity in a trainload of thirty, forty or fifty cars per train; it is a cheaper operation than where you gather thirty or forty cars up from six or eight different operations. I feel that the cost of operation which has in most cases been considered in naming the rate or movement of traffic might justify a reduced rate for quantity movement such as a trainload of thirty or more cars. I don't go along with the possibility of taking the advantage of a trainload rate and ordering twenty or thirty cars and producing fifteen or twenty and [fol. 174] expecting to get the lower rate thereby. Should any trainload rate be named less than a single car rate I think it should be predicated on the actual movement of a given number of cars in one train, and in my estimation that number of cars should not be less than thirty, recognizing that thirty ordinarily is the minimum number of cars per train, except possibly on some lines where grade conditions are against a movement of that tonnage. In that event your expense of operation is much greater where you are limited by excessive grades. But personally I feel that a trainload rate where there are thirty or more cars could be justified.

Cross-examination:

Mr. Henderson:

Q. In this exhibit 16 here, why do you use twenty cars instead of thirty, if thirty ought to be a trainload?

A. That exhibit is just a sample or an indication of what a twenty car operation would produce.

Q. You could produce a thirty car operation with very little more expense, couldn't you?

A. Yes, it is possible, so far as your wages and expenses that are incident to the operation, men employed, etc., that the expense of a thirty car operation would not be very much greater. It would be increased according to the increase in number of cars and the number of engines that might be involved.

Q. The revenue which you produce from twenty cars, $7,670.00—ten cars more would increase that approximately one-third?

Mr. Hayden: 50%.

Mr. Henderson: Yes, don't you think you could wipe out that little loss with that extra ten carloads?

[fol. 175] A. I would require at least 50% more cars for an operation.

Q. Yes, but taking it all through you have $674.00 of a loss on

twenty cars, dont you think you could put those other ten cars in that trainload lot you have been talking about and if you did that you could have gotten rid of that $674.00 loss?

A. I don't know.

Q. You think you have all the expense items in the exhibit 16 that you should have in there?

A. Not by any means.

Q. That ought to be considerably higher.

A. Yes, as was brought out by some of these other gentlemen, there are some expenses not in there that should be in there.

Q. Why did you take one-third of the investment for twenty cars on a thirty mile haul—do you think you would not be hauling over sixty cars on that thirty miles?

A. I had in mind that that would fit an operation on the Tacoma-Eastern, the Willapa Harbor Line, The Grays Harbor Line, and the Everett Branch, where approximately one-third of our business, is logging business. Now as a matter of fact the proportion for the log business on some of those lines mentioned is in excess of thirty-three and one-third per cent.

Q. It is as high as 60%, isn't it?

A. In one exhibit it was approximately 60%.

Q. And do you have any operation in mind on the Tacoma-Eastern for instance of the thirty mile haul, where they only get out twenty cars per day when they are operating?

[fol. 176] A. Yes, the majority of the operations are considerably less than twenty cars per day.

Q. On the thirty mile haul?

A. I think the operations on that branch average twenty-eight miles.

Q. Take the Stillwater to Everett over the twenty-nine miles on the Milwaukee, exhibit number eleven, 11,039 cars, twenty-six days would be considerably more than twenty cars per day, wouldn't it in your own exhibit?

A. Yes, that is about forty cars per day.

Q. On approximately a thirty mile operation?

A. Yes sir.

Q. And that is in the month of November, 1920?

A. Yes sir.

Q. When practically all the logging camps were shut down?

A. At least they moved that number of cars that month.

Q. Well, if it is a fact that during the month of November, 1920 the logging camps were shut down and it was a very dull period for logging business that 11,039 would not be representative would it?

A. As to the number of cars?

Q. Yes, for an average month?

A. I don't know what the total operations for the year from Stillwater would be to Riverview, but that number of cars from one operation approximately forty per day, I would think that would be representative.

Q. If you do increase the cars to forty per day on your exhibit

number sixteen, which is practically the same length of an peration, don't you think you could wipe out that deficit of $674.00?
[fol. 177] A. I question it because the exact figures showing the cost of an operation of that kind, if they could be segregated for a statement of that nature, would be far in excess of the figure shown.

Q. Well, then this exhibit 16 serves only the purpose of demonstrating that you could build up a set of figures that would show a deficit in view of the fact that they don't include all of the figures that should be in there, is that true?

A. There is a deficit that could be shown in just a few of the more prominent figures in a portion of that.

Q. Did you ever attempt to apply this same principle that you apply in exhibit 16 to the movement of any other commodity, a thirty mile movement with a twenty car daily capacity?

A. No sir.

Q. Don't you think you could show a deficit on everything you handled if you did?

A. No sir, I don't because the rates on most other commodities are considerable higher than shown there.

Q. You think your average rate per ton mile on that state business in the State of Washington is greater than your average per ton mile for logs?

A. I don't know just what our average rate per ton mile in Washington is.

Q. Do you think that your ton mile revenue, your average ton mile revenue in the State of Washingtn is greater than your average ton mile revenue on logs?

A. I would think it would be, yes.

Q. What would you say as to the rate on logs, if your average [fol. 178] ton mile revenue on logs in the State of Washington is in excess of your average ton mile rate on all commodities?

Mr. Balmer: Is that including the long haul as well as the short haul?

Mr. Henderson: That includes the average.

A. It is quite apparent that the average ton mile revenue on all freight is considerably less than it ought to be or we would not be showing these enormous deficits in operation.

Mr. Henderson: As a matter of fact your 1919 report shows practically a loss on all business, doesn't it?

A. Yes sir.

Q. And your 1920 report shows a greater loss than in 1919 so that the mere fact that you might show a loss on logs is not indicative of the fact that the log rate is out of adjustment with the rest of your rates, is it?

A. I think the log rate is considerably out of adjustment with the other rates.

Q. And then you stated as the volume of traffic increased the unit cost decreased, that is true, isn't it?

A. Yes. Now listen just a minute, there is decrease according to the fluctuations in volume of certain items, principally those involved directly in transportation costs, and it has a slight influence over the total operating cost. So far as maintenance of track is concerned there probably would not be much influence there from volume.

Q. That is there are certain fixed charges that would not be particularly influenced by the volume of traffic?

[fol. 179] A. Fixed charges, maintenance charges of tracks and structures.

Q. Taking exhibit ten which is the cost per thousand gross ton miles, does that include all freight?

A. Yes sir.

Q. Revenue and non-revenue?

A. Yes sir.

Q. I notice in that exhibit the second item for February, 1920 your total operating costs are $15.17 per thousand gross tons, is that correct?

A. The Bellingham Division?

Q. Yes?

A. Yes.

Q. And your total operating costs for January of the same year was $13.99?

A. Yes.

Q. Can you account for the difference there of 250% in a month?

A. That was influenced by maintenance charges. You can see that the transportation costs remain practically stationary, $7.09 in January and $8.48 in February. While the total operating costs were $13.99 in January and $15.17 in February. That indicates that there must have been some excessive maintenance charges in that month, possibly due to floods or renewing a bridge or something abnormal as the maintenance charge.

Q. Did you have a falling off in business?

A. It would not produce anything like that because the transportation expense is not affected any way near in the same proportion.

[fol. 180] Q. Taking your comparison of 1920 with 1921—1920 operating costs $13.99; 1921 operating costs $10.73, what does that indicate?

A. The *affect* of 1921 compared with 1920 is influenced almost entirely by the loss or a decrease in business.

Q. Your transportation costs went up very materially to-, didn't they, in 1921?

A. Yes.

Q. What was the reason for that?

A. Loss in business.

Q. And your other costs went up in 1920?

A. Yes, loss in business, and then we had a 21% increase in wages, that applies to practically all employes as decided by the Labor Board.

Q. That is since January, 1920?

A. Yes, May 1st it went into affect.

Q. So that your gross ton mile costs for the Milwaukee Railroad would not necessarily be comparable with any other railroads that had a great deal larger volume of business?

A. No.

Q. And the cost per gross ton mile is very materially influenced by the volume of business?

A. It is to quite a large extent, yes.

Q. To such an extent that the total operating costs may have been doubled during that year?

A. Yes.

Q. Now with reference to switching service for logs, do you think that the switching service for hauling logs is greater than the switching service in handling other commodities?

[fol. 181] A. No, I would not say that it is greater than all other commodities. There are some cases in the handling of logs that there is not as much involved as in handling the same number of other cars where there are a great number of consignees in a number of different places to spot the cars for unloading. Now, we have about four times as much switching of log cars in order to handle the bad orders as we do in almost any other class of business. That involves a proportion of switching expense greatly out of line with the general business.

Q. Now that is just the bad order switching you mean? I understood you in your original statements to say that one of the reasons why the logging operations was more expensive than other operations was because of the extensive switching. It may be that I misunderstood you.

A. I said the excessive cost of gathering up the business, which with the log train operation is in the nature of a traveling switch engine—take it on the Willapa Harbor Line where the average haul is around ten or eleven miles to several operators in the territory, not far distant from each other, each contributing five, ten or fifteen cars, a crew going around to all of those different loading stations or connections with our main line, gathering up the business—that expense is much greater than the ordinary commercial loading.

Q. But where a logger is producing his logs from one or two or three sides and has twelve or fifteen cars per day, the switching costs to handle that business is not at all comparable with handling other business where you pick up a car here and a car there, is it?

[fol. 182] A. Why if you picked up your log business here and there a car at a time it would be comparable with picking up grain or any other commodity. Now you can take a full trainload of coal the same as you can take a full trainload of logs from one location and the expense is no greater picking up fifteen carloads of logs than it is fifteen carloads of coal where it is at one location.

Q. And was it on that theory that you justified the difference between the trainload rate and the single car rate, that in picking up the traffic and delivering it at the terminals that there was considerable less expense than there would be in picking it up in carload lots?

A. Where there would be an operation that would produce thirty cars for a train the expense would be less. We have with our larger logging operations usually to deal with a logging railroad that gathers their logs out in the timber and delivers them to us in lots of twenty to twenty-five or thirty cars, now where such deliveries are made the expense of gathering them up with our crew is not as great as picking them up a few cars at a time.

Q. Now where in the State of Washington do you assign special crews and special engines to the logging business?

A. On the Willapa Harbor Line, on the Grays Harbor Line, on the Tacoma-Eastern, and when the log business is good on the Everett Line.

Q. That is you assign a crew to do nothing else but the logging business?

A. Yes.

Q. And do you ever assign a crew to any one particular shipper? [fol. 183] A. I don't recall any such assignment here in the State of Washington, but I presume that we do have such assignments.

Q. Do you make such assignments where you have say only an average of twenty cars per day to handle?

A. I would say not.

Mr. Clifford: You said that certain items of expense were constant or varied very little with the volume of traffic, can you state what the percentage of the total expense those items are?

A. I would say 75% or 80%.

Mr. da Ponte: You mean by that that 75% or 80% of the total cost of operation remains constant regardless of the volume of business?

A. Yes.

Mr. Balmer: In that connection Mr. Nicholson, is the logging business itself a constant business or is it subject to periods of stagnation and depression?

A. It varies more or less dependent upon climatic conditions and influenced somewhat by market conditions.

Q. And in periods of depression in the business with particular reference to your exhibit 16, isn't it true that you would have a large proportion of the expense that you have shown here going on constantly without nearly as much revenue to offset it as is shown here?

A. Yes sir, with the equipment that could not be diverted to other traffic.

Q. Also your interest charges would be going on and your maintenance charges?

A. Yes sir.

Mr. da Ponte: Would the trainload of thirty cars referred to by [fol. 184] Mr. Henderson be at all representative of the average log movement?

A. It would be representative of the average number of cars per train not necessarily of the average log movement.

Q. So that an exhibit computed on that basis would not reflect the net result of the logging operations to the railroad company?

A. No.

Q. You would have to take a much smaller operation to get a more nearly representative one?
A. A representative revenue?
Q. Yes.
A. Yes.

Mr. W. H. Abel:

Q. Will you turn to your exhibit 14 that relates to the Independence Logging Company shipments, I believe, that is from Independence to Preachers Slough—now that rate is $1.87½ for a thirty-six mile haul?
A. Yes.
Q. And that is for the month of November, 1920?
A. Yes.
Q. Was November a representative month?
A. So far as the log operations are concerned I believe it was.
Q. And 575 carloads were hauled from Independence to Preachers Slough?
A. Yes.
Q. According to your statement could you say that was at a loss?
A. Yes.
Q. That was from one shipper, wasn't it, from the Independence Logging Company?
[fol. 185] A. Possibly.
Q. Now then how many cars were devoted to that particular operation, that is from Independence down to Preachers Slough?
A. I couldn't give you that Mr. Abel.
Q. I notice that you have assumed in your exhibit 16, that a train of twenty cars is the average and that to deliver one load a day would require the use of eighty cars, which would be an average mileage of 7½ miles per day per car, is that a fair average?
A. The miles per car per day would necessarily take in the Eastern movement.
Q. So it would be fifteen miles?
A. Yes.
Q. Is that a fair average?
A. That is above the average Mr. Abel. I read into the record the average for the Coast Division, which for the month of November is 9.66 miles per car per day.
Q. Well now let's take it on the shipment from Independence to Preachers Slough, 36 miles, the train would run down once a day and back, I assume; the cars would be unloaded as soon as they got to Preachers Slough, would they not?
A. Why, I presume so if nothing interfers.
Q. Well, why do you assume that it would take four days to load and unload that train of cars?
A. Simply because when there was the greatest demand for logging cars to satisfy the shippers and we assumed that the shippers were doing all that they could to load cars promptly and the railroads were [fol. 186] handling them as promptly as they could and the unload-

ing was being carried on as expeditiously as was considered practicable we didn't average more than ten to twelve miles per day per car.

Q. Well, isn't it a characteristic of this class of freight that the delay is not in the unloading, that the unloading is effected in a few minutes, immediately upon getting to the dump, whereas you have assumed two days for unloading purposes?

A. It is possible Mr. Abel to take one car or one train of cars and shove it on a log dump and unload them in a remarkably short time.

Q. And isn't that the practice too?

A. The practice is as the average movement of cars is. Now as stated before there was great pressure from the shipper, every reason why the railroad should expedite the movement, every reason why the unloading should be accomplished as quickly as possible, but with all that extreme pressure which has existed among you logging gentlemen for a year or two preceding probably December, we accomplished just so much with that car.

Q. Well now are you familiar with this particular operation from Independence to Preachers Slough?

A. I am not with that particular operation, but I don't question but what you can unload cars very promptly.

Q. Does the railway company own the dumps as a rule?

A. We own some. A few have been built by the logging companies and in some we have joined with the logging companies.

Q. Do you make any difference in your rates on account of the ownership by the company of the log dump?

[fol. 187] A. I think not.

Q. You charge just as much where the logging dump is owned by the shipper?

A. A traffic man would have to answer that who is responsible for the rates existence, I don't know.

Q. Would you say that good railroad management justifies a movement of twenty cars per train?

A. Just an exclusive train of logs?

Q. Yes.

A. I would not where freight conditions would permit of more, as it is considerably more expensive to handle a light train than a heavy train. Now all of the railroad operations have worked for economy in moving this ton one mile. It has produced your greater car and heavier engine.

Q. Would the grade conditions on the Grays Harbor Branch justify the movement of as much as forty cars of logs, in solid log trains?

A. It would have to consult the superintendent to see what the grade conditions on this particular piece of track are. I don't recall just what our grades are.

Q. It is a water grade from Preachers Slough?

A. If it is from Independence down to Preachers Slough I would say that 50 or 60 cars per train is what we should handle.

Q. Could you obtain a statement showing the number of cars devoted to the shipments made by the Independence Logging Com-

pany, I am now assuming that that is the only shipper from Independence down to Preachers Slough?

A. Mr. Eccles, do you know how many cars are in that service?

[fol. 188] Mr. Eccles: Eighty to ninety last season.

Mr. Abel:

Q. Now then could you furnish us with a statement showing the movement of cars for each month of last year—I am now assuming that November will not be a representative month?

A. We will be very glad to.

Q. You have assumed Mr. Nicholson that it takes two days to unload a car of logs in your statement, exhibit 16, have you not, you have assumed that it takes eighty log flats to produce a movement of twenty cars of logs per day, that would be two days for unloading and two days for loadingg, is that your assumption?

A. I am assuming four to one as the ratio of cars required for the movement.

Q. Is that because the demurrage of two days are allowed the shipper for loading and two days for unloading?

A. No sir, that is from actual experience in moving logs. Now we find that loggers take their cars out into the woods and keep them there from two days to three weeks.

Q. But you get demurrage?

A. Not always. The law requires us to collect it, but there has been ways found to avoid it, I have been told.

Q. Well, but it is not an extensive practice to avoid doing it?

A. No, not general, but I just recently had a very strong request to put on a station force at Independence for the purpose of collecting demurrage—for one year there was very little demurrage collected.

[fol. 189] Q. Well, do you usually collect demurrage at the unloading end?

A. Where it is the consignees that causes the delay, yes.

Q. Can you give us figures showing the average length of time that it takes the company to unload logs?

A. I could not give any figures Mr. Abel, other than that for the assignment of a certain number of cars to a service we get a production of so many loaded cars per day. Now it is assumed that all of the operations meet some interference, and when everybody is under pressure to produce the best we get an average of approximately four cars for each one loaded.

Q. Well, there is nothing in the nature of things that you know of that would justify a delay of two days such as you have assumed for the unloading of logs?

A. Yes, I can imagine that probably one-half of the logs that might come in on a train would have penalty defects in the way of grabirons being broken off or brakestaffs broken in operation that the law will not permit us to even spot them for unloading until they are repaired. We have several operations of that kind. It might take one, two or three days before we would repair a safety appliance.

Q. Would you then say that although it only takes a few minutes

to unload a trainload of logs, that the cars were in such a state of disrepair that it averages two days to unload?

A. No, we are taking the average condition of the cars, average condition of operation, the average condition of loading in the wood, and the average condition of unloading, and for a given period of [fol. 190] thirty or ninety days or a year it requires so many cars to handle a certain operation, and that operation produces an average of so many loaded cars per day.

Q. As to this Independence matter, from Independence down to Preachers Slough, could you produce a statement for last year showing the cost of repairs?

A. No, if we would follow every car that moved from Independence to Preachers Slough and go through our records, we might possible pick out the exact cost of each one of those cars for the proportionate part of the year that they were in that particular service, and we might have an enormous amount of expense getting it, but I don't think that the statement would be in any way interesting to you. I don't see that the expense would in any way be justified.

Q. You have assumed by your exhibit 14 that upon a movement of logs from Independence to Preachers Slough there was a loss of $5,220.00 during a given period, but isn't it true that you handle logs from quite a number of other shippers that don't include even one-half of the movement of logs to Preachers Slough unload at the same dump?

A. Possibly, if all the logs down there were handled with just as much if not a great loss. I took this example because it happened to be for that particular territory. The biggest movement we had there was 576 cars.

Q. But the same train hauled a good many logs from Balch, from Cedarville and from Saginaw?

A. Yes, we handle quite a number of cars from many other places. Where the rate was the same the cost of movement would be just the same and the loss would be just the same. In that month we [fol. 191] handled 540 cars from Cedarville to Hoquiam. That is an average haul of 36½ miles.

Q. And the same train crew did the hauling too?

A. Possibly.

Mr. da Ponte: But in that connection Mr. Nicholson the result would be the same I suppose?

A. Yes sir.

Mr. Richmond: Please get exhibit number nine, that is that weight. In this exhibit I notice there is a difference in weight of logs as to locality. For instance at Glacier these logs would seem to weigh 8.01 pounds. Maple Falls 8.34, and Bellingham 7.89 pounds These are the three northern points, and in the Snohomish Valley the logs coming through there weighed at Everett, they would seem to weigh 7.74 pounds, and Cedar Falls 7.99, and at Tacoma 8.30 pounds, with a general average of 8.21 pounds. Could you explain why logs vary in the different localities, in weight?

A. I do not know unless it would be owing to the growth of the tree, which would produce a finer grain.

Q. Well, I think that is quite true. Did you ever weigh or do you know, at any time have any logs from the Willapa Harbor weighed and what their weight would be?

A. I don't know what their weight would be. In fact these are the only figures we have available, which were supposed to be representative of the number of feet per car and the weight in pounds per car.

Q. Well, would you be willing to accept it, in figuring the maximum capacity of your car, an eight pound weight basis? Say for instance you took your 80,000 flat and you have a maximum loading [fol. 192] capacity of 80,000 would you be willing to predicate that upon the basis of eight pounds per foot to arrive at that capacity of the car?

A. Well, I don't know, in some timber of course it weighs much more than others. Hard wood is considerably heavier.

Q. We are speaking now of logs that are commonly handled in this country, fir, hemlock and cedar.

A. I don't know about cedar. I imagine that would weigh much more than fir and hemlock.

Q. I will set you right it is generally known that hemlock is the heaviest, fir the next and then the spruce, and the cedar is the lightest. What I am leading up to is this, you said a minute ago you thought the minimum ought to be 8,000 feet. I was wondering how you were going to handle big logs and work on an 8,000 minimum and still remain within the 80,000 maximum?

A. I think that you will find that any kind of log loading, that the capacity of the car is not taxed with the weight; it is more the bulk of the load and not of the loading that determines the quantity on the car. Here is one car weighed at Everett, says, 9,110 feet with 68,000 pounds. I have no doubt but that was an 80,000 capacity car. Here is another car with 10,200 feet on it that weighed 76,000 pounds. So that there are no cars in this tabulation here where the weight would be in excess of what is allowed on an 80,000 capacity car.

Q. Well according to your estimate there would be just 1,777 feet leeway. Now in working in big logs a logger is bound to lose on a minimum of 8,000 pounds and on the other hand your prices, I believe, are predicated today on a 9,000 basis, and it is working a hardship?

Mr. Welsh: Yes, for instance we can get a load that is under the [fol. 193] minimum and if you put on another log it is over the maximum and the crew says no you take that log off. If we pile three logs on we are under the minimum and if we put four logs on they won't take the car out of the woods for us.

A. I think the distinction must be on account of the safety of the load.

Q. No, you take three nice logs, they won't let you put on three logs if it takes you over the maximum?

A. The heaviest weight shown on that table is 81,000 pounds.

Mr. Welsh: I think we will not trouble with the railroads on that. Both the loggers and the railroad ought to get together on that.

Mr. Dudley: I assume, Mr. Chairman that at this hearing the evidence introduced by any one of the railroad companies is available for all, that it will be the purpose of the hearing to establish standard rates?

The Director: I think it can be assumed that that applies.

Mr. Dudley: With that assumption I think that this testimony will be all that we care to introduce except the exhibits which I have reserved the right to offer later.

Mr. Henderson: I don't take that to mean that the cost figures and revenue figures of one railroad would be indicative of what might be on another railroad. For instance we are not willing to agree that the figures presented by the Milwaukee would be applicable at all to the Great Northern or the Northern Pacific. I don't believe the Commission can receive them in that way and say that they are available by the other three carriers as representative of their operations.

[fol. 194] Mr. Balmer: I don't think that was the intent of Mr. Dudley, but in a case of this kind there is always certain evidence that is general in its application. Now there would not be any argument between us as to which was which. The figures introduced with reference to the Milwaukee's operations manifestly don't tend to prove anything in connection with the operations of the Northern Pacific, but in so far as the testimony offered in evidence by the carriers is general we want it to apply to all of the carriers and not only in the case of the witness who is on the stand.

Mr. Carey: I have no objection to the suggestion of Mr. Balmer that in so far as the testimony may be applicable to all of the carriers it may be considered as applying to all of them. But that necessarily involves a ruling by the Commission which is generally applicable and which is not, but I don't want to stipulate that a conclusion which is applicable to the Milwaukee is necessarily applicable to the other three carriers.

Mr. Dudley: I will say that the testimony I had in mind was this, there is, of course, a presumption that rates which have been voluntarily installed by carriers and maintained are reasonable. The testimony which we have introduced as far as our rates are concerned would probably tend to show that they are reasonable, but for the purpose of that presumption evidence will be introduced here to show the way in which this rate system prevailing in the State of Washington has grown up. Now that testimony will be introduced by representatives of some of the other carriers who have been in the field longer than the Milwaukee, and we want the benefit of that testimony. Also some of the other carriers have prepared compara-
[fol. 195] tive tables and statements showing the rates charged in other states as compared to the Washington rates. Now we want the benefit of that testimony. In other words we wouldn't want to call a witness here and have him put in his tariff rates in Minnesota, Montana and other states, and then the moment we close with him the Northern Pacific be compelled to take him up and introduce the

same sheets. They should be introduced for all the parties. All the general testimony should be applicable to all. There is no sense in repeating it, and I would be obliged to repeat it under any other rule. As I understand the purpose of this hearing it is to furnish the Commission with the information upon which they will formulate rates governing the transportation of logs, and I presume they will make those rates as far as practical, uniform. Now those rates probably will apply to some of the smaller carriers as well as the larger carriers.

Mr. Carey: Is it your suggestion that in any event the four transcontinental carriers be uniformly classed——

Mr. Dudley: You mean the same rules should apply to them?

Mr. Carey: Yes.

Mr. Dudley: Well it would depend entirely upon the order made by the Commission. Now the Commission may find that some one of these four carriers has some special line that necessitates a special rate—that is a question I cannot answer. Speaking generally the four larger carriers are working together. Take for example the Tacoma-Eastern Railroad where we have very heavy grades, the actual cost of operation might be greater on some line, and as to that detail they might ask for higher rates. Yet I assume that the Commission's order will probably establish a rate on the Tacoma-Eastern which will probably be the identical rate which they will establish for the Bellingham Road and the Everett Branch, and also [fol. 196] for the Northern Pacific, unless they have some special branches which will require special consideration. For instance the Oregon Commission held that where a road was built purely for logging and the timber was removed and the value of the road was gone they held in that case that the rates should properly cover the amortization of that log road. That situation would not of course apply to most of our lines. On most of the lines we expect to be doing a general business after the logs are removed, but there may — special lines on which that might happen.

Mr. da Ponte: We are offering this testimony now on behalf of the Northern Pacific and counsel is at liberty to contend that it is applicable or inapplicable as they see fit. Of course we have the right to make the same contention; the question of its applicability is for the future to show. There is a lot of it we would have to repeat and we don't want to.

The Director: Of course any figures as to profits or losses in operation on one line would not necessarily be true as to another line.

Mr. Dudley: But the weight of it and its applicability is entirely a matter for the Commission to determine.

Mr. Henderson: We agree with that, that is the reason I didn't want the rule announced *at* the testimony offered by one carrier should be considered for the other.

Mr. da Ponte: There was no talk of deciding the case yet——

Mr. Robbins: I have three witnesses here that are available and they will be very short and I would be willing to come back tonight and dispose of them, and it would be quite an accommodation to me to get back home and I want to come back here this evening and

[fol. 197] dispose of them. Two of them are extremely short and I think we could dispose of them tonight.

The Director: There are other matters and other engagements that would prevent our holding a night session tonight but we would be glad to take your witness- up the first thing in the morning and dispose of them if we can.

Mr. Robbins: That is all right.

The Director: We will adjourn until nine o'clock in the morning.

Wednesday, April 13th, 1921, 9 o'clock a. m., hearing continued; all parties present as before.

The Director: Mr. Dudley have you anything further?

Mr. Dudley: No.

The Director: Mr. Robins it is your turn to present the case of the Oregon-Washington Railroad & Navigation Company.

Mr. Robbins: I will call Mr. Dodds.

J. C. M. Dodds, a witness produced on behalf of the Oregon-Washington Railroad & Navigation Company, after being first duly sworn, testified as follows:

Direct examination.

Mr. Robbins:

Q. Your name is J. C. M. Dodds?

A. Yes sir.

Q. And you are the auditor of disbursements of the Oregon-Washington Railroad & Navigation Company with headquarters at Portland, Oregon?

A. Yes sir.

Q. I will ask you if you secured for me a copy of the Commission's letter of February 14, 1921, in which they requested certain information?

[fol. 198] A. I did.

Q. Now in regard to request number one in which they ask for a statement showing the actual log movement from each point of origin to each point of destination on the Oregon-Washington Railroad & Navigation Company, have you that statement prepared?

A. I have not been able to complete that. It will be at least the 19th of April before I will have that out. I have had all the available force working on this data, at no time less than eight and sometimes as many as twenty-three employed on this work and it has been impossible for my force to complete this information.

Q. Have you employed special assistants to complete this information?

A. I have.

Q. That is being prepared as fast as they can get it out at the present time?

A. Yes.

Q. You think you can have it ready by the 19th of April?

A. Yes sir.

Q. Now request number two in which they ask as to whether or not the logs are moving in solid logging trains, that is not in your jurisdiction?

A. No sir.

Q. That is being furnished by the operating department?

A. Yes sir.

Q. Request number three, showing the total number of loaded car miles, etc.?

A. That is dependent on number one and could not be completed [fol. 199] until number one is finished and will be furnished in that connection by the traffic department.

Q. That is being prepared however as fast as possible?

A. Yes sir.

Q. And you think that will be ready on the 19th of April?

A. Yes sir.

Q. Now request number four, statement of operations covering the following items of expense, etc., have you that information ready?

A. I have it with me.

Q. Is that in exhibit form?

A. Yes sir.

Q. Now how many exhibits cover request number four?

A. I have three exhibits which cover that item. I have six or seven copies here.

Q. Will you kindly furnish them to these gentlemen here at the table?

(Witness does so.)

Q. Now to keep this matter straight do you suggest that they be marked as one exhibit or how should they be marked, separately?

A. I would suggest each one be marked separately, because no doubt Mr. Calderhead will desire to use these separately in his calculations that he may wish to tabulate.

Q. Then for the purpose of identification we would like to have a number assigned to this Mr. Director, so that I may refer to it. Will you number it O. W. R. & N. number one, two and three?

[fol. 200] The Director: Do you want to introduce the sheets as separate exhibits?

Mr. Robbins: I think so.

The Director: It seems to me that it would simplify the matter to have them attached together and then you can refer to them as page one, two and three, etc., of exhibit number one.

Mr. Robbins: I really think it would be better to give them separate numbers because the information here is dependent largely on some other information to be furnished later and it might confuse things to mention them as one exhibit.

The Director: Very well.

Mr. Robbins: So if we could start with O. W. R. & N. one, two and three.

The Director: They will be marked O. W. R. & N. exhibits one, two, three, etc.

Mr. Robbins: Now referring to your top sheet which is A under the requested information, headed statement of total freight operations for the State of Washington, etc., maintainence of ways?

A. That will be O. W. R. & N. exhibit number one for the purpose of identification.

Q. Now then that is a statement of freight operations, that is a statement headed Freight Operations, etc. for the State of Washington, Maintenance of Way, etc.?

A. Yes for the following selected accounts for the state of Washington.

Q. That is O. W. R. & N. exhibit number two?

A. Yes sir.

Q. And number C, that would be statement of operating expenses [fol. 201] for the State of Washington?

A. Well, I have placed C, D, and E on the third exhibit, I mean the second exhibit. You see this B, C, D and E on the second exhibit on account of the fact that they were all practically sub-headings of B, that is of the general title under B, so I placed them under one exhibit.

Q. Now then what will your third sheet be?

A. The first two items on sheet two of the letter, which would probably be assigned F and G, although there are no letter prefixes there——

Q. Then the third sheet would be O. W. R. & N. exhibit number three?

A. Yes.

Q. And the statement of mileage of freight train performance comes next?

A. Yes, that is the next. I have made two statements under what would be paragraph five there, because it takes in the freight train miles, freight train engine miles, the gross ton miles and net ton miles, which I furnish on one statement, showing the total number of loaded ton miles and the total number of empty car miles. For that reason I segregated them. So the first section of exhibit five would be exhibit four and the second section would be five.

Q. That would be O. W. R. & N. exhibit 4-A then?

A. Yes.

Q. And the last sheet would be O. W. R. & N. exhibit five then?

A. Yes.

Q. Now in referring to O. W. R. & N. exhibit number one, is [fol. 202] that statement self explanatory or does it need any explanation on your part and if so you may explain it?

A. I will explain it in a general way so that those here may understand what has been used as the basis to work from and how the figures were derived. The Interstate Commerce Commission has provided a classification of accounts for the reporting of all operating

expenses for carriers and this classification is followed strictly by us in our accounting and is also the same accounts that are required by the various State Commissions in the states in which we operate. In addition to this the Interstate Commerce Commission has provided a classification outlining the basis to work upon in segregating expenses between freight and passenger, and we have literally followed that classification in our segregation made from this to give the total freight operations. Then we have certain rules that were issued by the Public Service Commission of the State of Washington for the purpose of allocating or ap-portioning to the State of Washington certain odd expenses that are incurred by the rail lines, and this set of rules has been followed in making the apportionment to the State of Washington, so as the result of the I. C. C. classification of operating expenses, dividing the accounts, according to the rules for separation of freight and passenger as to the expenses between those two classes of service, and the rules of the Commission of Washington for the allocation or apportionment to the State of Washington—we have these figures as a result. I will also state that these are the figures that will finally appear in the annual report which will be given in response to the request of the Department of Public Works of the State of Washington. We had not received their [fol. 203] blanks at the time of preparing these, but these are the figures that will actually appear therein. We have used the year 1920 in reporting.

Q. Now I understand this information was furnished at the request of the Commission and the same information will be contained in the annual report together with a great deal of other information which will later be filed with the Department of Public Works of this state?

A. That is correct.

Q. Now go to O. W. R. & N. exhibit number two?

A. The same information will govern that with the exception that Mr. Calderhead's letter requested certain details there which will also appear in the annual report to the Commission. All that detail is given here. This will be the same as will appear in the annual report mentioned.

Q. Now, is there any further explanation needed as to the balance of these exhibits or are they self-explanatory?

A. They are practically all self-explanatory as we have not adopted any basis whether or not they give any information, it has all been given strictly in accordance with the classification and rules. I might state that with the exception of number five, I was not able to comply with the request there giving the actual cost of repairs to loading equipment. This for the reason that it was impossible to give the actual costs. We find that there are many items that would enter into the costs which it is impossible to know the actual amount. It would be an arbitrary division of certain expenses if there was any figure arrived at, for that reason we use the word estimate, so that it will be understood that it was not actual because [fol. 204] it is impossible to arrive at it.

Q. So that due to the fact that light repairs may be made at one

place and the heavy at another place and the repairs may be done under different requisitions etc.——

A. There are thousands of requisitions for material and there are hundreds of time rolls used in making these repairs during the year, but in addition to that no matter how careful you are at the different points in regard to issuance of material there is an inclination on the part of the men to take something and forget to mark it on the requisition or to overlook giving a requisition, because we find that out at our inventory time; there is material that you cannot tell where it has been used, and it would be impossible to tell whether that was used on box cars or where it was used, but a certain amount of that expense naturally would be accruing to that particular cost. For that reason it is impossible to accurately state, that is to say that it is actual, because even though you take what is reported on that particular requisition in going through the requisitions for a year you would not be able to get every element of cost that would enter into it.

Q. Now is there anything further you can think of in connection with these statements?

A. No sir.

Q. At this time we desire to offer these statements in evidence and ask to have them marked Oregon-Washington Railroad & Navigation Company's exhibits one, two, three, four, four-A and five?

The Director: Any objection; no response. They will be admitted.

[fol. 205] Exhibits marked O. W. R. & N. exhibits 1, 2, 3, 4, 4-A and 5.

Cross-examination.

Mr. Henderson:

Q. Your statement which you expect to get out about April 19th will it include the total loaded cars handled by the O. W. R. & N.?

A. The statement we expect to get out by the 19th of April will show first the actual log movement from each point of origin to each point of destination on our line and the total revenues and feet and tonnage as shown on the billing movement. Also the mileage between the points of origin and destination and will show the total number of loaded car miles for that movement.

Q. That will be for the year 1920 will it?

A. Yes sir.

Q. Are you making any study of the 1919 movement?

A. No sir.

Q. Then your records are not in such shape that you can get the total loaded car miles and the revenue and the board feet without a great deal of effort for 1919?

A. It would be quite an additional expense. In fact it would incur an added expense through additional force employed and considerable time would be involved.

Q. Do you know of any way that the railroad company or the Commission could make a study of the log rates in order to determine their reasonableness without having figures showing the loaded car miles and the loaded cars and the revenue and the board feet?

A. For when?

Q. For a representative period?

A. Well, are you speaking of the loaded car mile movement of [fol. 206] logs or everything?

Q. No, I am just speaking of logs, because we are considering log rates?

A. We are going to give in this statement the actual log movement for 1920 showing the revenue and the feet and also the origin and destination of the loaded car mile.

Q. In 1920 you had your rates split along in August some time so that you didn't have any uniform rate applicable during 1920?

A. In regard to rates I am not in a position to state. I am not a traffic man and I don't know to what you refer either.

Q. You are not familiar with the methods used to determine the reasonableness of a rate that are used either by the carrier or the Commission?

A. No sir, that is handled entirely by our traffic department.

Q. Now referring to your exhibit O. W. R. & N. 1-A, the statement there includes all of the freight does it?

A. For the State of Washington as segregated as I explained, according to the rules promulgated.

Q. And does that include depreciation and maintainance of equipment?

A. Yes for the equipment, that is the only thing we write off depreciation upon.

Mr. Balmer: What number did you speak of there?

Mr. Robins: O. W. R. & N. 4-A.

A. No, this is marked number 1.

Q. Have you definite rules or has the Commission laid down definite rules for assigning the operation expenses as to freight and passenger operations?

[fol. 207] A. As explained in the beginning by me the Interstate Commerce Commission has given rules for the purpose and those have been followed literally.

Q. Now in the annual report of the O. W. R. & N. for the year 1919 which I show you, you have total operating expenses there of something over $8,000,000.00 is that correct?

A. Yes sir.

Q. And you have assigned directly to freight and passenger operation something over $2,000,000.00?

A. No, this shows but $1,600,000.00.

Q. That is for freight?

A. Yes sir.

Q. Well, I said to freight and passenger?

A. I beg your pardon, yes.

Q. Now will you tell us by what method you assigned the remainder of the $6,000,000.00 as to freight and passenger?

A. That would be rather hard to explain to you. I would refer you to the rules promulgated by the Interstate Commerce Commission. There are various bases used.

Q. Have they laid out any exact rules for apportioning operating expenses as between freight and passenger traffic?

A. They do.

Redirect examination.

Mr. Robins:

Q. The 1919 annual report of the O. W. R. & N. is filed with the Commission now?

A. Yes sir.

Q. And it contains the information similar to this and a great deal more than this for the year 1919?

A. Well it doesn't show in the sheets he has shown me the amounts that are apportioned in common to freight and passenger [fol. 208] because in 1919 during that period it was not called for. It showed the actual allocated expenses but the page was provided, the columns were provided on the sheet for that purpose, but owing to the condition of the operation under federal control part of those figures were waived.

Q. Well the point that I am making, there is sufficient information already on file with the Commission if it is desired to make any comparison for 1919?

A. There is.

Mr. Henderson: You don't mean with reference to log movement?

Mr. Robbins: No generally.

Recross-examination.

Mr. Welsh:

Q. What basis do you use in estimating your distribution, your charges between freight cars in general and logging cars?

A. I had our superintendent of motor power and machinery go through the requisitions and labor distributions and ascertain as near as he possibly could for the year of 1920 what was chargeable to logging operations. Now account 314, Freight Train Car Repairs—that is strictly repair charges. And the balance I showed against all other freight train cars.

Q. Then as a matter of fact this is purely and simply an estimate?

A. As I stated when I first explained these statements it was the best estimate that could be given, based on the material requisitions and the labor distributions, but there are certain items of expense which cannot be definitely and accurately ascertained.

Q. What do you mean by repairs?

A. In accordance with the Interstate Commerce Commission we [fol. 209] have an account provided for repairs on freight train cars, which includes repairs only, nor depreciation or any expense of that nature or any supervisoring expense such as our superintendent of motor power and his force.

Q. It does include rebuilding wrecked cars and things of that kind?

A. It does.

Q. And is that a considerable item?

A. I could not say as to what it amounts to, we have no tabulation showing that separate from our other repairs; although I would say that in comparing with the total there generally it is not such a large item.

Q. But you have no record of it?

A. No sir.

Mr. Dudley: Those repair items do not include repairs made on the road, running repairs?

A. Yes they would, anything chargeable to freight train repairs.

Q. Light repairs made out on the road, would that come into your account?

A. It would if it was so marked on the requisition. As I say there is always a certain element of difference in material, some train men might do something, and not perhaps give a requisition or make a requisition.

Q. In segregating these repair items was there an attempt made to separate them as between cars devoted to logging service and other classes?

A. There was to ascertain as near as possible the cost of repairs to logging equipment.

[fol. 210] Q. Do you know how that segregation was made?

A. I explained a short time ago that our superintendent of motor power and machinery took the actual charges from the material requisitions and from the time rolls as far as he could ascertain them for the year 1920.

Q. You don't know what facilities he had to know just what traffic these cars were in?

A. Well he would only know from the cars that were assigned to that service.

Mr. Balmer: You don't submit this statement as an exact statement of the cost of repairs to the logging equipment?

A. No sir.

Q. It is submitted as an estimate and purely as an estimate, determined as best you could get it?

A. Yes from the best evidence obtainable.

Mr. da Ponte: Are you certain that it includes repairs to logging cars?

A. I stated that account 314 would include any repairs occurring on account of wrecked cars, that is where they are repaired and put back into the service. Of course, if your car was vacated from your accounts on account of wrecks it would not go into the account.

Q. Suppose a car was destroyed and you had to rebuild it and you had salvaged some portion of it, that would not be in there——

A. You mean by rebuilding, entirely dismantling the old car and building a new car—it would not enter into this account?

[fol. 211] Q. There is a certain amount of cars destroyed by fire and utterly wrecked that have to be rebuilt?

A. Yes, that however would not enter into account 14, freight car repairs.

Mr. Henderson: In your report for 1920 you show under the item lumber and other forest products 1,016,347 tons in the State of Washington, can you make a segregation of that item as between logs, lumber, shingles and lathes, etc.?

A. Well, it might be done but it would be a very expensive proposition.

Q. Well don't you get your total by adding up the sums of the other various items?

A. I might tell you that a great deal of those statistics where you have considerable operation such as we have on our line are handled through Burroughs' machine and certain information called for is arranged for in advance and no further segregations made, and they tabulate those on cards, and it is run through the machines. Now to get those further segregations it would be necessary to go back to the originating documents and work it all over for each segregation. When you make up your report such as we did for the year 1919 you just gather all this information and total it and send it in and then you have no way of making the segregations from then on—no further detailed segregation unless it would be by special request, as I say it would incur considerable expense and time to make one, to re-work over the original records.

[fol. 212] Q. Now can you explain how you get these totals here in the lumber products, if you don't keep a record of the total amount of logs, lumber, shingles, lath etc. and cord wood—if you don't keep those totals how do you arrive at this total of lumber products which you don't segregate?

A. If you are asked for certain information by the Commission, those are grouped—you have your lumber products. Certain things that come under that heading would be classified to that particular item and so marked on the cards and no other segregation made. They don't segregate the shingles and the lath and tabulate those separately and consolidate them but they are all classed under one heading right together and tabulated that way.

Q. And those are taken off from your station of abstracts and turned in to you or the general accounting office from the station abstracts just as lumber products?

A. Yes.

Mr. Clifford: Some elements of total expense that are shown on your statements would vary directly with the volume of traffic; others would vary little or none with fluctuations in the traffic. What per cent of the total expenses is the expense that fluctuates with the traffic?

A. Well that is something that I am not in a position to answer because I have never made a study along that line.

Q. Do you know of any figures of that sort being prepared?

A. No there is nothing to my knowledge that we have prepared showing that.

Q. Is it possible to make any comparison of that sort with the figures you have?

A. I don't know how to go about it because some one would have to give us a plan or basis to work on before we could start out and nothing of that kind has been attempted.

[fol. 213] WALTER H. GUILD, a witness produced on behalf of the Oregon-Washington Railroad & Navigation Company, after being first duly sworn, testified as follows:

Direct examination.

Mr. Robbins:

Q. Your name is Walter H. Guild?

A. Yes sir.

Q. And you are Assistant Superintendent of the O. W. R. & N.?

A. Yes sir.

Q. What territory does your jurisdiction cover?

A. North of Portland.

Q. That is that would cover the joint main line from Vancouver to the Sound and also the Grays Harbor Branch?

A. Yes sir.

Q. Now you have no jurisdiction even in Eastern Washington at all or the Spokane country?

A. Not at all.

Q. Well you have some general knowledge in regard to the logging operations in Eastern Washington as well as Western Washington?

A. In a general way, yes.

Q. Before I go into that, let me ask you this, the Commission has requested certain information here and in their letter of February 14, 1921 they ask this question "Whether moving in exclusive log trains or on mixed freight trains with other commodities" let me ask you if you have any exclusive log trains operating in Western Washington?

A. We have no exclusive log trains.

Q. Well, can you say whether or not we have any in Eastern Washington in the vicinity of Spokane, from your general knowledge of conditions?

A. I could not state as to that.

[fol. 214] Q. Well you know from your general information that all the logs practically that are handled in Eastern Washington come from Idaho through Amwoco into Spokane, don't you?

A. Yes sir.

Q. So that is really an interstate movement after all?

A. Yes sir.

Q. Now then, where is the log movement in Western Washington on the lines of the O. W. R. & N.?

A. In the Grays Harbor territory.

Q. And the Tono Branch?

A. Some from the Tono Branch, moving into the Grays Harbor territory.

Q. And that is substantially all of the log movement on the O. W. R. & N. in Western Washington?

A. Yes sir.

Q. Now where is your heaviest log traffic in Western Washington?

A. On the North River Branch.

Q. When you refer to the North River Branch do you mean the line from Primo to North River?

A. From Primo to North River Junction.

Q. That is a branch of a branch?

A. That is a branch of the Grays Harbor Branch.

Q. Yes. Now how are those logs handled there in that heaviest movement you have from Primo down to North River?

A. How do you mean?

Q. Well what is the actual operation and where do you load and unload and what is the operation that you go through?

A. Well practically all of the logs loaded at points on the North River Branch are unloaded at Preachers Slough on the Grays Harbor Branch, 3.2 miles from the junction of the North River Branch. [fol. 215] Some logs loaded at Midson on the North River Branch are unloaded at Aberdeen. Some logs move from Balch to Hoquiam. Some from Tono to Hoquiam.

Q. Now take a representative movement of logs from Primo down to Preachers Slough, from the time you hook onto them with your engine at Primo down to Preachers Slough and unload them, and describe in detail the operations if you will?

A. Well the North River Branch is 12 miles long and the junction is 1.1 miles from Cosmopolis and Cosmopolis is the headquarters for our crews operating in that territory. The train starts out of Cosmopolis with the empties and goes to Primo and returns to Cosmopolis, distributing empties on the way east and picking up the loaded cars on the return trip, and placing empties on the interchange tracks or at the loading platforms or loading dumps. In some cases the logging roads have interchange tracks at the junction and in some cases we place the cars at the log dump. There are cases where the logging operator has no locomotive facilities for moving cars.

Q. Do you know from your general information the number of log flats in use here in western Washington by the O. W. R. & N.?

A. We have about 250 flat cars equipped with patent bunks and assigned to the log service in the Grays Harbor territory.

Q. And when you speak of a patent bunk, what do you mean by the patent bunk? There have several different kinds been described here.

A. Well a patent bunk—there are several types of bunks that have been patented; they are metal bunks that are placed on the cars.

Q. Well, how are those particular 250 cars equipped, what kind of bunks are the- equipped with?

A. Well we have some Northwestern Bunks and some Hercules Bunks and some Gerlinger Bunks. The Gerlinger Bunks is our present type.

[fol. 216] Q. Are those bunks supplied at the expense of the shipper or the carrier?

A. The carrier.

Q. Now in furnishing cars what do you say about this 4 to 1 statement that was made by some of these other witnesses?

A. Well our actual operations show that that is about correct. Our average runs a little more than 4 about 4½.

Q. And why is it necessary to have so many cars in that service?

A. Well the time consumed in the movement, unloading, returning empties, loading cars. It is not a straight a way movement.

Q. I am now referring to Mr. Calderhead's Exhibit "A", page 10. I would like to ask you the name and places there between which you have no log movement?

A. Well, at the present we are handling no logs from Wabash to Centralia.

Q. Just state the ones that you are handling?

A. The first item there from Arctic to Preachers Slough, Item 170.

Q. Well, what about 171, Arctic to Primo, that movement seems to be in the reverse direction.

A. There is a movement of logs from Arctic to Primo at the present time. There might occasionally be a car of cedar that moves from Arctic to Primo to the shingle mill, but that is very few cars moved.

Q. But you say that you do have some logs moving from Arctic to Preachers Slough, under Item 170 then?

A. Yes.

Q. Now what is your next one?

A. The next one is Balch to Hoquiam.

[fol. 217] Q. That is number what?

A. 115.

Q. Number 115, Balch to Hoquiam, then what is your next one—Cedarville is not shown on here?

A. We don't handle logs out of Cedarville.

Q. Well, how about Midson, you spoke about that awhile ago, that is shown on here—I guess not? Yes it is, 165——

A. That is Midson to Saginaw.

Q. There is no logs moving from Midson to Saginaw at the present time?

A. We are moving logs from Midson to Aberdeen. The next item would be 185, from Primo to Cosmopolis; there are some logs that move there.

Q. Have you any from Primo to Aberdeen?

A. No, we are not moving any logs from Primo to Aberdeen.

Q. But you do move logs from Primo to Preachers Slough?

A. Yes, we move logs from Primo to Preachers Slough.

Q. And from Independence to Preachers Slough?

A. There is no movement from Independence to Preachers Slough.

Mr. Henderson: From Primo to Hoquiam?

A. We have no movement from Primo to Hoquiam at the present time.

Mr. Robbins: So that is practically all of the log movement you have on the O. W. R. & N.?

A. No the movement from Midson to Aberdeen is not covered here and from Tono to Hoquiam.

Q. Now what is the fact as to whether or not your cars are broken up any in the log service, that is as compared with the general operations?

A. The damage to the equipment to the logging service is a great deal heavier. That is as to the number of cars that are damaged as [fol. 218] well as the amount of damage.

Q. Well what is the usual damage to a log flat, what part of the car is it that is damaged usually?

A. Well the decking, some part of the log bunks and break staffs, grab-irons, sills, and truck parts.

Q. Well where are your light repairs made, on the Grays Harbor Branch?

A. At Cosmopolis.

Q. And how long is it necessary for the ordinary light repairs to hold a car out of service?

A. A day.

Q. And what percentage of the 250 cars is in use down there is it necessary to repair during any given time?

A. Well, in March our records show that 25% of the cars were in bad order.

Q. That is in March of this year 25% of the log cars were bad ordered and the light repairs were made at Cosmopolis?

A. Yes.

Q. Now where do you make your heavy repairs?

A. At Portland.

Q. Now what percentage of the cars is it necessary to make heavy repairs on do you know?

A. I do not know.

Q. Can you give an estimate?

A. I would not undertake to say.

Q. Well now do you get any return haul on these log flats, loaded haul?

A. Well no, not to speak of, practically no returns.

Q. But you would carry a donkey back into the timber, or supplies for loggers, or things of that kind?

A. Yes, if they had a donkey engine going into a logging camp we would certainly use a logging flat for this movement.

[fol. 219] Supervisor Spinning: You say there is usually a 25% of your logging cars that have light repairs made on them?

A. I said in March last 25%.

Supervisor Spinning: I thought you said a year.

A. No in March last.

Mr. Robbins: Now when these cars are assigned to the logging service on the Grays Harbor Branch what is the fact as whether or not they are ever used for any other business at any other time?

A. They are not available for any other business for the reason that they are equipped with patent bunks, and principally for the reason that it is necessary to hold the log flats in the logging territory, to protect the logging business.

Q. Well do those cars get away from you once in a while and go east or to other places?

A. No. There has been exceptional case where a car has gone off from the district, but it is our practice not to allow cars equipped with patent bunks to leavt the district. We had a case recently, the only case I have known of in 5 years, of a car leaving the district. The Saginaw Timber Company loaded a car of spruce for the box factory at North Puyallup, and inasmuch as they had the car loaded we allowed the car to go through and that is the first case that I have known of in the 5 years of a log car leaving the district.

Q. Well in slack seasons when the camps shut down for the Fourth of July or Christmas are these cars allowed to go out of the service?

A. No, they are held to protect the log business which it is presumed will be resumed shortly.

Q. They are held right on that branch?

A. They are held in that territory, yes.

Q. Now speaking of these car repairs Mr. Guild, what is the fact as to whether or not that is charged up to the shipper or paid by the carrier, how is that done?

[fol. 220] A. We only undertake to collect from the shipper the cost of repairing damage to a car when the damage is so great and of such a nature that there is no question as to the responsibility. There are very few cases where there is any charge made against the shipper for damage. If a car is returned to us by a logger with all of the sills broken and is further unfit for log service and there is no question as to the responsibility being with that logger, we undertake to collect for that damage, but that is all.

Q. Well I presume the usual damages is more or less progressive any way, in other words you will crack a wheel on one load and possibly break it in two on the next load.

A. That is correct and that is the reason that we are unable to place the responsibility.

Q. How does that work out in practice, do you usually charge the shipper or have you charged up anything to the shipper on that line?

A. Yes in the last year we have had 4 cases of charging damage to cars against the loggers.

Q. And what was the nature of that damage?

A. Well in one case the logger in loading dropped the log on the car and it fell through the deck and broke the decking and broke 3 or 4 sills. There was no question as to the responsibility. In another case the logger had a runaway on his logging road and broke up three cars so that they had to be loaded on a flat car before they could be returned to us, and there was no question as to his responsibility, and he agreed to accept the responsibility for their repairs. In another case a car was returned to us with a split flat wheel and the car was held at the junction point until a joint inspection could be made and the logger accepted the responsibility for the damage. In another case as I recall it, the car was returned with 3 or 4 wheels broken; It was manifestly not in that condition [fol. 221] when it was delivered to the logger and he assumed the responsibility for the cost of repairs to the car.

Q. But in the general run of lighter repairs, at least, there is no attempt made to charge those back to the shipper?

A. No.

Supervisor Spinning: And in case you have an assignment of cars to an individual logger do you hold him responsible for all of the damage done?

A. We have no assignment of cars to any individual logger; all of our log flats are pooled, but it is not our practice to undertake to charge against the logger the ordinary damage to logging equipment.

Mr. Robbins: What do you mean when you say that you pool these log flats instead of assigning them, what do you mean by that?

A. We serve 5 logging outfits with 250 cars. We have 238 cars in service there at the present time to be exact. The business of each logger fluctuates from time to time. One period one logger has a good show and will be loading heavy and the other logger is moving camp and is not loading at all for a day or two and it is necessary to pool all the cars in order to get maximum service from the cars.

Q. Now in unloading these cars there at Preachers Slough how is that train operation handled there, coming in and unloading, and holding the crew, etc.?

A. Well at Preachers Slough all of the unloading is performed by what we term the road crews as distinguished from the yard crews, because Preachers Slough is not a terminal on our Grays Harbor Branch, it is an intermediate station and the road crew taking the logs to Preachers Slough places them on the rollway and they remain there until the cars are made empty, so that they can return the cars to Cosmopolis or to the logging camps as the case may be. It is necessary for the engine to hold on to the cars and [fol. 222] shove them over the rollway until the cars are made empty.

Q. But you don't have a yard crew assigned to that service, and it is necessary to hold the road crew there?

A. That is true of Preachers Slough. Where the cars are moved by a yard crew they perform practically the same service as the road crew would perform.

Q. Where does the switchman get that string of cars?

A. They are delivered in the Hoquiam yard by the regular train.

Q. And they move through the terminal out to the unloading point for switching and unloading?

A. Yes sir.

Mr. da Ponte: About what would be the variation in cost of repairs, I mean how high would they run in the case of a wreck or serious injury to a car?

A. Well a car having three or four broken sills, the cost of repairs would probably be about $100, while the usual damage to equipment is of course considerably less than $100.

Q. Those cars have a steel underframe do they?

A. Not all of them, we have some wooden, and some steel.

Q. Now suppose you bent a steel underframe that would cost considerable?

A. Yes, it would have to go to Abina shops.

Q. It would cost you how much?

A. All I know is that estimate furnished us by the mechanical department in cases of that kind and they estimate a damage of that kind at $50.00.

Q. I notice according to the segregation made by the preceding witness they have charged to the logging equipment $53,251.00 divide that by the 250 log cars that you first mentioned gives an average of $213 per car per annum, would that be about right according to actual experience in -our judgment?

A. I think so.

[fol. 223] Mr. Balmer: Where injuries of a severe character occur through the fault of the loggers such as these four instances which you mentioned, do you know whether or not the cost to the railway company in making those repairs, which as you say is billed to the logger, is included in this figure of general car repairs which the last witness testified to?

A. I do not know as to that.

Mr. Dudley: Whenever you take your cars to the point of unloading there is an inspection is there not?

A. The inspection is made at Cosmopolis.

Q. Well suppose you would unload at Preachers Slough, is there any inspection made there?

A. In some cases the inspector goes with the train from Cosmopolis to Preachers Slough and makes the inspection there.

Q. That inspection is either by the regular inspector or the train crew?

A. The inspection is not always made after the train is unloaded, it is sometimes made before.

Q. But an inspection is made at least once per trip?

A. Yes sir.

Q. And that takes about how long?

A. We figure about two minutes to the car.

Q. That adds to your delay at the terminal point?

A. I would not say that it did because as a general rule the inspection is made at times when other service is being performed. Sometimes the inspection causes delay to the crew. The air test which is made on the train always causes delay to the crews; you might consider that as a part of the inspection.

Q. Now in case of an injury to or the breaking of a safety appliance in that case you are to cease moving the cars until they are repaired. If the repairs can be made in the field you have to do it?

[fol. 224] A. We couldn't move that car out of the repair point. We could move the car into the repair point.

Q. Unless you can make the repair in the field?

A. It is not our practice to make any repairs in the field. The repairs are all made on the repair tracks.

Q. But you have to take the car out of service of course immediately?

A. Yes sir.

Q. And these injuries that occur in logging operations are very frequently to a safety appliance device?

A. Yes sir.

Q. Have you any estimate as to the number of miles per day you make with a logging car?

A. No I have not.

Mr. Robbins: Now following up the question there in regard to inspection, if your train was ready to move it could not move until it was inspected, could it?

A. The inspection might be performed before the train was ready to move but the air test could not be made——

Q. I know, but I am assuming that the train is ready to be moved and the inspection has not been made?

A Then it would have to be delayed.

Q. So that it does consume the time that is necessary to make the inspection?

A. Yes sir.

Q. Now did you ever have any trouble enroute in logs unloading?

A. Yes sir.

Q. How does that happen, what is the cause of it.

A. Well there are various causes; it may be due to the car being improperly loaded, it may be due to the rough places in the track, it might be due to defective equipment.

[fol. 225] Q. Now what becomes of those logs after they become unloaded enroute?

A. They are picked up by the railroad company and delivered at destination.

Q. But how is that handled, how are they picked up?

A. Well it is necessary for us to use a locomotive train, and a working train and go along the railroad and pick up the logs and load them on the cars and deliver them at destination.

Q. And how often is that done as a usual thing?

A. About every two or three months.

Q. And that expense charged to the shipper or not?

A. No that expense is assumed entirely by the railroad company.

Q. What is the fact as to whether or not any damage ever occurs in the unloading of these logs enroute?

A. Well there is considerable element of danger involved. We have had cases where damage has actually occurred. We had one case where a log fell off and struck the small depot at Preachers Slough and knocked it off its foundation. I have seen places where cars unloaded at passenger platforms and caused considerable damage and the cost of picking up the logs etc.—

Q. Did you ever have a case where a log fell off on a bridge and damaged it?

A. Yes, we had one case of that kind within my observation.

Q. And what were the circumstances surrounding that accident?

A. The circumstances were the same as in all of those cases—a log happens to fall off when the train is close to the bridge and the logs strikes part of the bridge.

Q. Did it put the line out of commission until the repairs were made, and what was the expense of the damage?

A. The damage in that case was not great, the elements of greater damage were there.

[fol. 226] The Director: Well suppose a log rolled off or several rolled off by reason of defective loading, would you collect any damage from the shipper?

A. No, we don't because when we undertake to move the car we have admitted that the car is properly loaded, because if it wasn't properly loaded we would not undertake to move it.

Q. Then you consider that if the company accepts the load and begins to move it that it relieves the logger from any liability in respect to the loading?

A. Yes, that is our practice.

Mr. Robbins: Well what is the rule or practice in regard to main line operations with a log train passing a passenger train?

A. On double track on this district a train handling logs is not permitted to meet a passenger train between stations. In other words the log train is standing when a passenger train passes on the opposite track.

Q. What is the reason for that?

A. The reason for that is that if the cars are not well secured on the car there is more liability of their falling from the car and in case of double track they would fall on the opposite track and it might occur at a time when there was no time or opportunity to warn trains moving on the opposite track.

Q. Now do you have to do that with any other commodity?

A. No we don't because that is the only commodity that is not secured on the cars.

Supervisor Cleland: Do you have any double track between stations over which you haul logs?

A. The logs moving from Tono to Hoquiam move over a short

stretch of double track. At the present time we have no double line movement.

Mr. Mount: Tono to Winlock and Tono to Chehalis is a double line?

[fol. 227] A. Yes we have handled logs over those tracks.

Mr. Dudley: Do you move logs by train at night?

A. We do on single track, we don't on double track, except with the one exception between Centralia and Chehalis where there may be a movement after dark.

Mr. Dudley: That is the usual practice with railroads where there is a double track, not to allow log train to move at night for the same reason, that of logs falling off and causing accidents?

A. Yes sir.

Supervisor Cleland: In that connection what percentage of track over which logs actually move in this state is double track?

Mr. Dudley: I couldn't answer that question.

Supervisor Cleland: There is not much double track in this state, is there, except between Portland and Seattle?

Mr. Dudley: Portland and Seattle.

A. Hoquiam to Aberdeen.

Mr. Dudley: And Seattle to Everett. As I say my profession is to ask questions and not answer them.

Supervisor Cleland: What I had in mind was that the majority *was* of log movements are over single tracks and not over double tracks.

Mr. Dudley: I think there is no question about that.

Supervisor Spinning: Notwithstanding your admission I would like to ask you a question.

Mr. Dudley: That is a concession if your Honor please.

Supervisor Spinning: Now this gives the yearly expenses per car?

Mr. Dudley: No, I think it shows the daily expense.

Supervisor Spinning: Could you give that, the full daily expense?

Mr. Dudley: Multiplying that by the number of days in a year, will show that.

[fol. 228] Mr. da Ponte: We could not concede that for the Northern Pacific because we have some very heavy movement on double track. The St. Paul & Tacoma Lumber Company is our heaviest double track, without doing some checking.

Cross-examination:

Mr. Carey: As I understand it the great bulk of the log movement on your line is confined to Grays Harbor and vicinity?

A. Yes sir.

Q. Do you move any considerable quantity as far north as Tacoma?

A. We move no logs north of Centralia.

Q. None north of Centralia, so all of your movements would be confined to the territory from Centralia to Grays Harbor?

A. Yes. Will the exception of the logger at Tono. He has shipped formally to Winlock and to Chehalis and he is now shipping to Hoquiam, I don't know where he will ship next.

Q. That is an exceptional movement though?

A. No, I would not say that it was exceptional, he has been shipping about 6 months.

Q. No regular movement?

A. Yes a regular movement because the mill at Tono has been dismantled and the regular operations have been discontinued until he could find a market for his logs, but it is a regular movement out of Tono.

Q. But all your movement in Western Washington in the territory indicated is purely a local movement, you have no interstate business?

A. None of it interstate.

Q. You have no interstate business touching Western Washington?

A. No sir.

Q. As I understood your testimony you are not personally familiar with the log movement in Eastern Washington?

[fol. 229] A. No only in a very general way.

Q. As a matter of general knowledge though I presume you know that it is true that the log movement on your lines in Eastern Washington is very much less than in Western Washington?

A. I could not say as to that.

Q. And you do not know what the percentage of interstate movement to state movement is in Eastern Washington?

A. No.

Q. Now there is no movement on your lines between Eastern Washington and Western Washington?

A. No.

Q. So that the Western Washington movement is entirely isolated from the Eastern Washington movement?

A. That is correct.

Q. Do you know anything about the difference in the class of timber that is handled in Eastern and Western Washington?

A. Only in a general way. I understand that there is considerable pine in Eastern Washington.

Q. That is, Western Pine is their principal market; over on the West Side it is fir, hemlock, spruce and cedar?

A. Yes sir.

Q. Now you don't know how those compare in weight or load or anything of that kind?

A. I do not.

Q. All your movement I presume is handled on flat cars, that are especially equipped for the log movement?

A. Yes.

Q. And these are the 41 and 42 foot flat cars?

A. The 40 to 42.

Q. Now how many flat cars normally is assigned to log movement in Western Washington on your line?

[fol. 230] A. Well we have at present about 238 cars in the Grays Harbor territory. We have had as high as 250 or 260.

Q. Well would that number of cars take care of all of your business, say between Chehalis and Grays Harbor and in that territory?

A. Probably, yes, but we have had placed a requisition with our

people for 25 additional cars to protect this movement from Tono to Hoquiam because we find that the present equipment is insufficient.

Q. Now what proportion of that total number of cars that you have assigned to the logging service is equipped with bunks?

A. All of the cars we have assigned to the log service are equipped with patent bunks.

Q. Are those all steel bunks?

A. No, we have a hundred wooden cars and the balance steel—did you say bunks?

Q. Bunks yes.

A. They are all steel bunks.

Q. Some of the car bodies are wood and some steel?

A. Yes sir.

Q. Do you know what extra expense there is in equipping a car with bunks?

A. I only know the estimate given us by the mechanical department.

Q. What is that?

A. They tell us it costs $20 per car to equipp a car with bunks; the labor for applying the bunks, that don't include the cost of the bunks.

Q. Do you know what the cost of the bunks is on an average?

A. On our last requisition that we made to our Albina shop people where the bunks are made, they told us that the bunk cost would be $66 per bunk or $132.00 per car.

[fol. 231] Mr. Robbins: A total of $152 per car.

Mr. Dudley: What bunk was that?

A. That is the Gerlinger Bunk.

Mr. Carey: That would make $152 per car installed on the car?

A. Yes sir.

Q. Now as I understand it the use of these bunks are advantageous to both the carrier and the shipper, that is, the bunk installed on the car tends to minimize the wear and tear on the car by evenly distributing the load?

A. I would not say that, because if it was left to the railroad they would equip the car with wooden bunks. The steel bunks are supplied at the request of the loggers.

Q. The use of the bunk whether steel or wood, tends to protect the car and therefore is an advantage to the carrier?

A. Yes sir.

Q. And the use of the bunk also facilitates the unloading and is therefore an advantage to the shipper?

A. Yes.

Q. I think you have already testified on your direct examination that your company furnishes these bunks at its own expense?

A. Yes sir.

Q. Do you know about the average cost of the kind of flat car that is used in the logging service?

A. I asked that question of our mechanical department not long

ago and they advised me that the cost of the flat cars without the bunks was possibly $1,600.00.

Q. Would that apply equally to the wooden and the steel car?

A. No, the steel car would be more expensive.

Q. About how much if you know?

A. I could not say. They gave me an average figure.

Q. You think that $1,600 would be the average of wood and steel?

A. Yes sir.

Mr. Clifford: Do you know the maximum number of log flats under load that were moved in your jurisdiction in any one day during the year 1920?

[fol. 232] A. I could not tell you for any one day. I can tell you for one month.

Q. Alright, what do the figures show for one month?

A. In March of 1921 we handled 1,500 carsloads of logs.

Mr. Clifford: That is practically 50 cars per day. You stated that the number of logging flats on the tracks in your jurisdiction was about 238?

A. At the present time, yes.

Q. Now how many did you have during that month of March?

A. That 238. The figure is taken from the March operation.

Q. Was March a heavy month or an average month?

A. March was an average month.

Q. You stated that approximately that 4½ cars was required in the log service to haul one car of logs per day, in other words, if I understand your statement, for ever- car that is moved under load there are 3½ cars that are in the woods, in movement, empty, or standing on the track ready to be picked up?

A. Yes sir.

Q. In the month of March when you moved those 1,500 cars did you have any cars that were not assigned to the service?

A. I don't understand your question.

Q. Well was all of your equipment in use during that month?

A. Yes it was all in pool and it was all in use.

Q. Did you have any foreign cars?

A. No sir.

Q. Could you have hauled any additional loads of logs during that period?

A. Yes.

Q. To what extent?

A. Well I don't understand just what you mean, the capacity of our railroad is considerable greater than 50 cars per day.

Q. You say the capacity is?

A. Yes sir.

Q. Now I think if you made your simple computation you will see, [fol. 233] if I get your answers correctly, that 50 cars is your maximum capacity, if it takes 4½ cars to handle 1 loaded car per day?

A. You mean the maximum equipment?

Q. Yes exactly.

A. That is correct. We assign the equipment to fit the business as near as possible.

Q. In other words, in that month of March you could not have handled any more without getting additional cars from some source or other.

A. Yes we could, by increasing our train service at a considerable expense.

Q. Well now if you increased the train service you decrease this percentage of 4½ cars for the movement of one car?

A. Yes it would greatly increase the expense of handling the logs.

Q. Now to what extent could you reduce that 4½ cars?

A. I couldn't say.

Q. Very materially?

A. I would not say we could because in order to increase the train service to such an extent that we could reduce that very materially under the method the cars are handled by the railroad company and also by the logging company, we would have to organize a certain regular service and that regular service would take certain conditions——

Mr Mount: In other words it is your practice to operate in the most economical way, isn't it?

A. Yes.

Mr. Clifford: Was there a shortage or unfilled orders for logging flats in your jurisdiction in that month of March 1920?

A. We kept the loggers supplied with cars during that month with the exception of one or two days when they claimed they were short.

[fol. 234] Mr. Carey: Coming back to this question of cars, which do you find the more satisfactory in actual railroad operation, the steel flats or wooden flats, I mean as applied to the logging business?

A. Well I don't see that there is much difference. Our company provided 100 wooden flat cars with the idea that the cost of repairs to the wooden flat cars would be less than the cost to the steel cars, for the reason that the damage done in unloading cars, such as bending of the steel sills, or the breaking of the *breaking of the* wooden sills is considerable and the wooden sill could be replaced at considerably less expense than the steel sill.

Q. Well, has it worked out that way?

A. That is my observation, that it has, yes.

Q. So your experience on your line is, that the wooden car is more advantageous than the use of the car to the carrier?

A. To that extent it is, that the wooden car is not as servic-able for our business as the steel car.

Supervisor Cleland: Did you state whether the wooden car or the steel car cost more?

A. I could not say. From my own knowledge I would say the wooden car was the least expensive.

Q. You say that $1,600 was the average price for steel and wood flat cars, which is the highest, the wood or the steel?

A. I would say the steel car costs more.

Supervisor Spinning: How much do you move or do you expect a car to haul in a year, how many thousand feet of logs?

A. In the logging service?
Q. Yes.
A. Well, we know from our observation that we will get just about one day's loaded haul to 4 cars.
Q. Then that would be about 2,000 feet per day, and 300 days would be about 600,000 feet annually?
A. That is correct.
Mr. Robbins: Now about this estimate of $1,600 per car, has the O. W. R. & N. bought any logging flats recently?
[fol. 235] A. I couldn't say as to that.
Q. You don't know what this estimate was based on, what time or what conditions?
A. No, I do not know.
Mr. Balmer: The question as to what a car costs nowadays ought really to be answered by a member of the mechanical department shouldn't it, not a member of the operating department?
A. It should, yes.

Mr. Henderson: Well have you one of your mechanical department here to testify?
Mr. Robbins: No, we have not.
Mr. da Ponte: That statement will be furnished, as to the cost.
Mr. Henderson: What is the difference who answers it if they know?
Mr. Robbins: He doesn't know.
Mr. Welsh: He ought to know, he put in a requisition for 25, he ought to know.
Mr. Carey: I just asked the witness if he knew the cost——
Mr. Mount: The cars cost about the same on all railroads, as Mr. Nicholson testified.
Mr. Henderson: I thought so, but Mr. Nicholson put in an account of $2,500.00.

Mr. Balmer: Since counsel seems to be more anxious to answer this than permitting the witness to answer it, I want to say that there is nothing in this record showing that the Great Northern put in the cost of a car at $840.00. In another logging case that was tried before this Commission our witness put the figures at $840 and testified in the same action that it was a very conservative estimate, and it also appeared in that other case that when some of that same class of cars were broken up by the logger in the woods and the logger was billed for the repairs to the cars the repair bill ran over $1,200, which demonstrated very conclusively that $840 was too low. Now [fol. 236] I asked this witness whether or not the matter of the cost of the car ought not to be more properly answered by a member of the mechanical department and not by a member of the operating department?
A. It should.
Q. Your information has not come from making an- inquiries to any car manufacturing concern?
A. It has not.

Q. Now your company, as I understand it, operates no logging cars that are not equipped with bunks?

A. They do not, not in this territory. I don't know anything as to the eastern territory.

Q. Have you ever had an opportunity to actually compare the performance and the repair cost records of a car equipped with bunks and a car in similar service not equipped with bunks?

A. I have not.

Q. And therefore you don't know from any actual record or any personal investigation of that sort whether at the end of a given number of years the repair cost record of a car equipped with bunks will show lower than the repair cost record of a car not so equipped?

A. I do not know as to that.

Q. Now with reference to the actual falling off of logs in the course of operation, has it been your observation that the falling off occurs sometimes through negligence on the part of the logger in loading?

A. Yes.

Q. I presume your rules like those of other railroads provides that the train crew is not to pick up the car or the train until they find that the loads are properly placed?

A. Yes.

Q. As a matter of practical operation and practice do you find [fol. 237] that such a rule is effectual to preclude the taking of improperly loaded cars?

A. It is not.

Q. And the reason that you don't bill against the logger in cases where the car of logs spills en route is, because you have such a rule and you expect that if you attempt to enforce the rule against the shipper he will quote your own rule against you to the effect that your crew ought to have inspected the car before it was taken out?

A. Yes.

Q. That doesn't, however, alter your conclusions that in some cases the spilling of the loaded cars is the logger's fault?

A. It does not.

Mr. Dudley: It is impossible to tell after the logs are on the car whether they are properly loaded or not?

A. Only in a general way.

Q. And the inspection by the train crew before taking the lead cannot be done with any degree of certainty as to whether it is properly loaded or not?

A. No, that is a matter of experience, with the man making the inspection as to the general appearance of the load.

Q. And if you put in a claim to the shipper for spilled logs and claim that it is not properly loaded, he will also contend that it is the rough track that spilled the logs, and you will be unable to prove to the contrary?

A. That is it.

Q. So as practical proposition the burden of proof is on you and you cannot recover the money in sufficient time to collect it?

Supervisor Cleland: The price you gave on equipped flat cars with patent bulk was $132 for the two bunks and $20 for the labor, is that the present price?

A. Yes that is the estimate that you made by the mechanical department to the transportation department.

Q. When was that?

[fol. 238] A. Within the last month.

Q. Mr. Kellogg, what did your figures of $130 include, and what kind of bunks were those and did that include labor at the present price?

Mr. Kellogg: I don't recall that figure but my understanding is that that is not the current price.

Mr. Dudley: Mr. Dow got that information.

Mr. Dow: The present quotation on the Turtle Back bunks such as we use is $130 per pair.

Supervisor Cleland: Does that include installing?

Mr. Dow: No sir, that is the price.

Supervisor Cleland: What is the estimate of cost of installing on the car?

Mr. Dow: I could not answer that.

A. (By the witness:) I would like to state what we call the Gerlinger bunk, used by our company, is made in our own shops. Mr. Gerlinger has a patent on the bunk, but we make the bunk and pay him a royalty. The bunk consists largely of rails, of which we have a considerable quantity, scrap rail unfit for other purposes.

Mr. Dudley: I understand in your list of bunks you gave that you didn't include the Turtle Back?

A. I didn't.

Q. You don't use that?

A. We don't use the Turtle Back.

Mr. Welsh: Do you make any charge to the shipper at all for the use of those bunks?

A. Not to my knowledge, we don't make any charge for the use of the bunks.

Q. Have you ever made any charge for the use of those bunks?

A. Yes, I understand that on main line operations in times past a charge was made, whether or not it was collected I do not know.

Q. But that practice became obsolete and has been abandoned?

[fol. 239] A. Yes sir.

Q. Now as to your unloading facilities at Preachers Slough, what is your method of dumping?

A. Well the method of dumping is to shove the cars over the rollway.

Q. Over an incline track?

A. Yes, on an incline, and many of the cars unload as soon as they are shoved on the incline. I would like to state first that it is necessary to stop the train and trip the bunks and then shove the cars on the incline, and many of the cars unload when shoved on the incline and many do not.

Q. And then you have to use the jacks on them?
A. Yes it is necessary to use the jacks to unload.
Q. Who owns that——
A. I could not tell you, it is my understanding that the Washington Boom Company own the trestle works and the railroad company owns the tracks.
Q. Speaking of logs that are lost in transit, isn't it a fact that all of those logs are eventually recovered?
A. No they are not all eventually recovered. Very few of them are lost though.
Q. Perhaps one in several years might not be recovered?
A. I would not say what percentage would be recovered.
Q. You don't think it would be one hundredth part of 1% that would not be recovered?
A. I would not undertake to say.
Q. And at whose expense are they recovered?
A. They are picked up at the expense of the railroad company.
Q. And you charge that back to the shipper?
A. We do not.
Q. Have you ever done so in the past?
A. We have not to my knowledge.
Q. Now as a matter of fact your North River road bed out there is unballasted?
[fol. 240] A. It is all bal-asted.
Q. Part of it is ballasted, and part of it is unballasted?
A. It is all bal-asted.
Q. But it is not in what might be called fair condition?
A. Yes, our North River Branch is in as good condition as our Grays Harbor Branch.
Q. Since when?
A. It has always been since during the period it was not in operation. Our North River Branch was built later than the Grays Harbor Branch.
Q. I went over it a year ago on a speeder about four times, and I believe I know what it is.

Mr. Dudley: Any man that rides over a road with a speeder who doesn't have to is incompetent.
Mr. Welsh: I was trying to collect some bills from some loggers.

Redirect examination:

Mr. Robbins: Further referring to this picking up of logs spilled en route, how much of a crew and equipment does that require?
A. Well the work train would require a regular crew of an engineer, fireman, conductor, and two brakemen, an engine and caboose; then we would have the locomotive train with the engineer and fireman to operate it, and we would have to have a bridge gang to go along with the locomotive train.
Q. And where is that crew called?
A. It would ordinarily start from Cosmopolis.

Q. And how long does it take to pick up an average load?
A. Well we figure we should pick up from 6 to 8 cars of logs in an 8 hour day.
Supervisor Spinning: Well, what would it cost per thousand to pick them up?
A. I don't know that I could answer that question off hand, as to the amount of service it would require to pick up a thousand feet of logs.

[fol. 241] Mr. da Ponte: We have some figures Mr. Spinning, that shows $12.00 and something.
Mr. Henderson: That is more than they are worth today, isn't it? You had better let them lie.
Mr. Balmer: Maybe that is the reason the loggers don't request us to pick them up today.
Mr. da Ponte: They have to pick them up today.
Mr. Henderson: You charge it back then to the shipper?
Mr. da Ponte: We don't charge them to the shipper.

J. W. Mount, a witness produced on behalf of the Oregon-Washington Railroad and Navigation Company, after being first duly sworn, testified as follows:

Direct examination.

Mr. Robbins:

Q. Your name is J. W. Mount?
A. It is.
Q. And you are Assistant General Freight Agent for the O. W. R. & N. with headquarters at Portland?
A. Yes.
Q. I will ask you if you made a study and investigation of this particular case and prepared some exhibits?
A. Yes.
Q. You have those with you?
A. Yes.
Q. In sufficient copies?
A. Yes I think so.
Q. I wish you would go ahead and explain those exhibits in your own way.
A. I would like to make some introductory comment about operations in this territory. The principal log traffic handled by the O. W. R. & N. is in Western Washington, in fact we have no movement in Eastern Washington. Our line from Portland to Seattle was opened for operation in January, 1910. Coming into this territory we entered a territory that was already served by transcontinental [fol. 242] carriers. We didn't initiate these log rates ourselves, but entering a competitive territory it was necessary for us to adopt the

general basis of rates obtaining at that time. Our greatest competition was with the Northern Pacific. They served both the Grays Harbor Territory and the main line territory from Portland to Seattle. A great many of the Northern Pacific rates were established under conditions in which they received other compensation than the transportation charge. As I understand the situation a great many of their rates were based on old contract rates. For instance, their rate from Weatherwax, a distance of 10 miles, was established as a compromise of a grade crossing case, and to illustrate the methods in which they made rates when they originally reached this territory, I have brought along my file and will read a letter from Mr. W. G. Skinner, then General Freight Agent of the O. W. R. & N. which was the line operating from Portland to Seattle. This letter is dated February 14, 1910, and is addressed to Mr. Henry Blakely, then General Freight Agent of the Northern Pacific, at Tacoma:

"DEAR SIR: For use in consideration of rates on our Grays Harbor branch will be glad if you will kindly send me copies of such tariffs as you now have in force naming rates on logs between points on your Grays Harbor branch. I have understood that you have in effect a rate of 60 cents from Montesano or a near by shipping point to Aberdeen, if so will appreciate a copy of this tariff and other special commodity and distance rates in force. An early reply will be appreciated."

On February 23, 1910, Mr. Blakely in reply to this letter wrote Mr. Skinner as follows:

"Answering your letter of the 14th I attach copy of Northern Pacific Tariff 398-B and Supplement No. 3 showing special rates on logs in this territory. I also attach log tariff 23815 showing distance tariff which is used between Western Washington points on this same class of business. This traffic in the immediate vicinity of Grays Harbor is pretty generally handled on special rates as you will note from examination of Tariff 398-B. Referring particularly to the rate you mention from Montesano, we don't carry this rate from that station but we do apply it from a point near Weatherwax, about a mile and a half west of Montesano. This was a case where the people took advantage of our misfortune and forced this rate on a matter of compromise on a grade crossing of our tracks, and some other troubles, in threshing out which we got the worst of it. I trust you will not take the Weatherwax rates as a basis of establishing log rates [fol. 243] on your line. Let me assure you that there is no occasion for any charity rates on this class of traffic."

I merely use the Weatherwax to Aberdeen example to show that there were conditions there from which the railroad company received benefit other than the transportation. As far as our own line is concerned we have had instances where other special conditions obtained, for instance, our rate from Saginaw to Preachers Slough. For a number of years the volume of our log business moved on this

rate. In our negotiations with the shippers at Saginaw we were forced to grant them an easement under our track there to reach the Chehalis River, they claiming that they could raft these logs down the river to Preachers Slough at a cost approximating $1.00 per 1,000 feet, and that if at any time we raised the rate above $1.00 per thousand feet they wanted the privilege of going under our track there and fluming down the Chehalis River, and in our contract negotiations with them this easement was granted, and we had this stick hanging over our head all the time, that if we wanted to handle this business we had to maintain this abnormally low rate. The fact that these rates were established to meet special conditions have been used from time to time by the shippers as yardsticks for measuring other rates and on the whole our other rates have suffered accordingly. Now going to Mr. Calderhead's Exhibit "A," I would like to state that a great many of the rates shown in here as applicable between points on the O. W. R. & N. are obsolete rates. They are merely paper rates and should have been cancelled when the movement of logs was completed. Logs are a little different from ordinary traffic in that when the log operations are completed between two points there will never be occasion for using that rate again. At the present time more than 50% of our log movement is from points on our Primo Branch to points on the Grays Harbor Branch. As to adjustment of rates in this territory the carriers have felt for a number of years, and have known for a number of years that the log traffic didn't bear its proportion of operating expenses or contribute its just proportion of [fol. 244] earnings. They have been actively engaged in working out a basis that would somewhere near meet the conditions obtaining both as to the cost of the service and the condition of the lumber business. In 1918 the subject was formally placed before the Portland District Freight Traffic Committee of the United States Railroad Administration by the carriers of this territory to work out a uniform basis of rates for the transportation of logs within the states of Washington, Oregon and Idaho and between those states in interstate traffic. A great deal of consideration and thought was given to this subject by the Portland Committee but for the various reasons no uniform basis of rates was established during the period of Federal Control, but the subject was still pursued by the carriers. About July, 1920, Mr. S. J. Henry, Agent of the Pacific Northwest Freight Traffic Bureau, compiled a proposed tariff for log rates, a copy of which was submitted to the Commission of the states of Washington, Idaho and Oregon, but on account of the very large amount of work on hand, the subject was not carried to a conclusion. I think the amount of work can readily be appreciated by this Commission. The carriers were preparing statistics and data for use in the proceedings before the Interstate Commerce Commission in the case entitled Ex Parte 74, which relates to the 25% increase of rates that went into effect on August 26, 1920, and in addition to logs there were a number of other commodities which were receiving special consideration, and shortly after August 26, this Commission opened proceedings on its own motion as a result of its opinion expressed in its considera-

tion of the 25% increase rates, and the carriers did not continue their investigation or preparation of establishing a uniform basis of rates for all three states, depending largely on the testimony to be given here in this case and the results of our testimony here which we hope will be satisfactory and which we hope will be satisfactory and which [fol. 245] will enable us to get our rates in Oregon and Idaho as well as on interstate traffic, on a fair and reasonable basis from both the carrier's standpoint and the shipper's standpoint. We realize that there are a number of inconsistencies in our present rate structure, in that we haul one man's logs, for instance, 10 miles, and charge him as high or a higher rate than we will another man for 15 or 20 miles. There are a number of these instances and a great many of them were made under special conditions, but, as a whole, looking at the situation generally, it is my opinion that a distance scale of rates should be established in this territory which will afford the shippers the benefit and advantages of their location. There undoubtedly are instances where on certain lines carriers would be entitled to charge higher than on other portions of their lines. So far as the O. W. R. & N. is concerned I have in mind the Primo Branch. This line was constructed at a very heavy cost. Its cost per mile approximated the cost of main line construction. It traverses a boggy, swampy country, so it was difficult to maintain a firm basis for the roadway. It has been subject to mud slides and washouts. It runs through a country that is sparsely settled. There is no agricultural development and practically all of the traffic consists of logs and forest products. Again referring to Mr. Calderhead's Exhibit "A," this exhibit shows the rates applicable in Oregon, Washington and Idaho and also on interstate traffic between points in those states. By the use of these rates Mr. Calderhead has arrived at an average rate according to distance. It is observed that the statement for Oregon only includes rates for the O. W. R. & N. Company. The O. W. R. & N. Company handles approximately one-tenth of the amount of the log traffic that is transported in the State of Oregon. The Southern Pacific Company alone transports more than 5 times the number of cars of logs handled by the O. W. R. & N., and their rates are generally on a higher basis than the O. W. R. & N. rates, and if they had [fol. 246] been included in that statement it would have increased the general average of rates shown in Mr. Calderhead's exhibit.

Mr. Calderhead: Is that the Southern Pacific Rates?

A. Yes, the O. W. R. & N. log and traffic rates are rates based on the handling at one time of more than one car. The rate is generally based on what we called train load lots, varying from 10 cars to 20 cars. I don't think that such a basis of rates is a proper basis, neither do I think it affords the small shipper the same advantage as the large shipper. In other words it is discriminatory. It has so been held by the Interstate Commerce Commission, and in view of the objection raised by Mr. Henderson the other day about the citations, I have procured a few here for him which I will be glad to give him. The Interstate Commerce Commission has repeatedly held that the mere fact that certain traffic is handled in trainload lots

cannot be made the basis of rates different from those applying to shipments in single carloads.

Planters Compress Company vs. C. C. C. & St. — Ry.: 11 I. C. C. 382.

Carstens Packing Company vs. O. S. L. R. R. 17 I. C. C. 324.

Anaconda Copper Mining Company vs. C. & E. R. R. 19 I. C. C. 592.

Rickards vs. A. C. L. Ry. 23 I. C. C. 239.

One of particular interest is the rate on live stock, that is the case of:

Woodard-Bennett Company vs. S. P. & L. A. and S. L. R. R., 29 I. C. C. 664.

J. W. Wells Lumber Company vs. C. M. & St. P. Ry., 38 I. C. C. 464.

There are a number of other- that I could get but I ran out of paper when I got that far. There has been some comment here to the effect that rates on logs bear some relationship and should be given some special consideration on account of the carriers receiving the haul on the outbound product; and a great many of these low rates have been established on that theory. In my opinion, and I think it is well supported by the evidence and the records, the rate [fol. 247] on the lumber business in this territory to eastern consuming points are below the normal basis in comparison with rates on other commodities which move from this territory. I have in mind the rates on canned salmon, canned fruit, canned vegetables, and wool and other commodities that move in volume from the Pacific Co-st to Eastern points, in comparison wit- which the rates on lumber are abnormally low. And v-ewing the subject from that standpoint it is obvious and axiomatic that the rates on logs should stand on their own bottom, that the rates on logs should be reasonable, and the rates on lumber should stand by themselves. Now from the standpoint of reason, per se of log rates I will make the statement that the rates in effect in this territory are the lowest rates provided for that transportation anywhere on the Continent of North America.

Mr. Welsh: You are taking in a large territory.

A. (Continuing:) It took me a considerable length of time to find that out too. Now comparing the rates locally in this territory with the rates on other low grade traffic. The rates on logs are very materially lower than the rates for other dead freight, that is for freight that don't require expedited service, what we tern low grade traffic, I have prepared an exhibit here showing comparisons of the rates on logs based upon actual movement for the years 1919 and 1920, that is, from and to points from which there was a regular movement for the years 1919 and 1920, compared with the rates and revenue per car on sand and gravel, brick and scrap iron, from Seattle to points between Seattle and Portland, equidistant with the log haul, and also on cement from Concrete, Washington, to points equidistant with the log hau-.

Mr. Robbins: Now for the purpose of identification we would like to have that exhibit marked O. W. R. & N. No. 6 and to save time we will offer it in evidence at this time and ask to have it marked. [fol. 248] The Director: Any objections?

Mr. Welsh: No.

The Director: It may be admitted.

(Marked O. W. R. & N. Exhibit No. 6.)

Mr. Robbins: Now referring to O. W. R. & N. Exhibit No. 6 I will ask you if this was prepared under your jurisdiction?

A. Yes, under my own direction.

Q. And have you found that it is correct so far as you are able to determine?

A. Yes.

Q. Now will you go ahead and explain O. W. R. & N Exhibit No. 6, if it needs explaination?

A. In O. W. R. & N. Exhibit No. 6 I reduced the rate per thousand feet to cents per hundred pounds based on a weight of 9,000 pounds per thousand feet. In support of this figure of 9,000 pounds per thousand feet I desire to offer as an exhibit a statement showing the results of weighing 10 cars of logs at Centralia, Washington, between January 21, and January 28, 1921. These cars were weighed loaded, were brought back and weighed light, and the net weight is the difference between the weight of the empty car and the gross weight of the car and contents. The exhibits shows the number of feet on each car and the average weight per thousand feet.

Mr. Robbins: We offer this exhibit in evidence and ask that it be marked O. W. R. & N. Exhibit No. 7.

The Director: Any objections: No response. It will be admitted.

(Marked O. W. R. & N. Exhibit No. 7.)

A. Now referring to O. W. R. & N. Exhibit No. 6 as previously explained, this exhibit shows the points from and to which there was a regular movement of logs during the year of 1919 and 1920. [fol. 249] When I say regular movement I mean a movement of 10 or more cars during the year. There were a few movements of one car here and there, but that is evidence that those cars were extraordinary movements and would not have any effect on the situation.

I have arranged these rates in distance order, which is shown in the third column. The fourth column shows the rates per thousand feet. The next column shows the rates in cents per hundred pounds, arrived at by using a weight of 9,000 pounds per thousand feet, and the next column shows the revenue per car based on a weight of 80,000 pounds. The reason I have used the weight of 80,000 pounds, well that is favorable to the log traffic as it doesn't ordinarily load quite that heavy. The movement of sand and gravel and brick and scrap iron and cement generally moves in loads of 80,000 pounds or more, according to the capacity of the car. In other words those commodities all load to the capacity of the car

and I use as a representative capacity 80,000 pounds. So long as I use the same figure on the logs as on the other commodities naturally this is a fair comparison even though it does give the advantage to the logs. Taking sand and gravel for the first item shown on that statement, covering the movement from Arctic to Preachers Slough, the revenue per car on a car of logs would be $15.20. From Seattle to Black River Junction, a similar distance, the rate on sand and gravel is 3¢ per 100 pounds and returns a car revenue of $24.00 or 60% more than logs. Taking brick the same distance returns a car revenue of $52.00 per car or almost four times as much as logs; and scrap iron $52.00 per car practically the same as the brick. Cement from Concrete to Hamilton, Washington, approximately the same distance would return about $64.00 per car or more than four times what a car of logs would return. The same general ratio will follow all through the exhibit and I believe it is self explanatory. The O. W. R. & N. Exhibit No. 7 has already been explained. It [fol. 250] shows the average net weight of logs loaded of 70,762 pounds and the average number of feet per car of 7,366, and the average weight per thousand feet of 9,606 pounds.

Q. Then considering O. W. R. & N. Company's Exhibit No. 6 in connection with Mr. Calderhead's Exhibit "A" that would show that the greater proportion of rates in Calderhead's Exhibit "A" are merely paper rates?

A. Yes, as I explained previously, they were rates that had been in effect for a number of years but should have been removed for some time, they have been eliminated from the tariffs months ago. There has been a recent decision of the Interstate Commerce Commission in I. & S. Docket No. 1251 involving wood rates, which was participated in by this Commission, and according to the press advice that I have, and a telegram from the Traffic Department of our Missouri office, I understand that the rate to be prescribed by this Commission and the Interstate Commerce Commission will be $1.15 per cord for distances of 10 miles and under, and 10¢ per cord for each 10 miles up to 200 miles. While these rates are a reduction of our present interstate rates, materially below our present interstate rates, I have as a matter of information here compiled a few figures comparing the revenue on wood with the revenue on logs for the same distance. For illustration I will take the first item shown on Exhibit No. 6 where the per car revenue on logs from Arctic to Preachers Slough is shown as $15.20 for a haul of 9.4 miles. On cord wood for this distance—slab wood—based on an average loading of 18 cords per car—on the O. W. R. & N. loading is heavier than 18 cords—but for general average of the territory I believe 18 cords will be about correct—wood would return a per car revenue of $20.70 as compared with $15.20 on the logs. Or, in other words, the revenue on wood is approximately 40% greater than on logs. We will take the movement from Arctic to Saginaw, on which there has been a considerable movement; a distance shown of 45.4 miles, and the per [fol. 251] car revenue on the logs for that distance is shown as $20.00. On the wood for 25 miles the per car revenue would be

$24.30 or an average of about 25% greater than on the logs. The same general relationship will apply to the other distances shown in the exhibit. There are a great many services rendered in the transportation of logs that are not generally rendered in the transportation of other commodities, and notably among them are the following items: Logs comprise entirely a short haul traffic business. The terminal expense on logs is ordinarily greater than on other traffic, which is accounted for to a large extent by the train crews and the switching crews having to help dump these logs. In other words their time is tied up during the dumping process. Another important item is the amount of heavy car repairs. Another is the fact that the log traffic is more hazzardous than other traffic. Mr. Guild, the witness that preceeded me outlined some of these hazzards, such as logs falling off and the unsafe conditions of operating logging trains on the main line, and damage that has been incurred by logs falling on bridges, one instance on a bridge, and the great element of wreck, risk of a wreck by logs falling on the right of way; and another important element, the necessity for the assignment of equipment for specific movements in order to insure a steady movement. On the O. W. R. & N. it has been shown that it requires approximately 5 cars to take care of each loaded car movement. This, of course, results in a much larger investment in equipment than is required on other traffic. Another item is picking up logs, which is done at the expense of the railroad company.

Supervisor Spinning: What per cent is the pick up of the entire movement?

A. I have not the figures on that Mr. Spinning, and I don't think the data is available at this time. It is an oversight or I would have had this information obtained for the period since this case came on. In fact I can see that it would have been very valuable to have taken [fol. 252] these from that period up to the present time; but our operating people tell us that it is substantial. While, of course, it don't approximate any large percentage of the total number of logs handled, at the same time it is a much more expensive operation than the transportation expense. A great deal has been said and a great deal of stress has been laid on the development of the cost of handling this log traffic. I have been engaged in the traffic business now for approximately 18 years and it has always been a source of great interest to traffic officials to ascertain or to get hold of any information that will show any of the facts accurately as to the cost of handling traffic. It has been my experience that there has never yet been any method evolved, and I don't know how there ever will be, that will accurately reflect the cost of handling any commodity. There are only a very few items that you can directly allocate. This condition of affairs have been recognized by the Interstate Commerce Commission and the courts. I would like to read from the decision of the Interstate Commerce Commission in Docket 8182, decided January 15, 1918, reported at 48 I. C. C., on page 234, in which the Commission had the following to say: "No one contends that a carrier should be compelled to haul a commodity for less than cost

but an acceptable demonstration of what is the actual cost to a carrier of transporting a given commodity has yet to be determined, and the cost will vary upon different lines. Therefore, as a general rule, the reasonableness of rates is still determined according to the usual well-known methods, important among which are rate comparisons, distance, and consideration of traffic density, and population." This clearly indicates that the Interstate Commerce Commission are of the opinion that it is impossible to arrive at an accurate estimate of the cost of handling any traffic and are satisfied to be governed by the usual methods used and employed by carriers to demonstrate the reasonableness of rates. In this case, in the case of logs, I have used [fol. 253] the comparison of rates with other low grade commorities that we handle, as well as statements that the rates on logs in this territory are the lowest to be found in the entire United States. Further the Interstate Commerce Commission have approved considerably higher rates than those involved in this proceeding. I would like to cite for the information of the Commission and others the Commission's decision in I. & S. Docket 256, reported in 30 I. C. C. pages 36 to 39, and 35 I. C. C. I don't have the page of that. The case in 35 I. C. C. is a partial rehearing on the decision in 30 I. C. C. These cases were decided in 1914-1915, prior to the war, before any general increase of any kind had taken place. In that proceeding the Commission approved on a haul of 10 miles or less a rate of 2¢ per 100 pounds, ranging up to 5½¢ per 100 pounds for 100 miles. Since that time those rates have been increased 25% twice, and the 2¢ rate would now be approximately 3½¢.

Supervisor Cleland: Are those log rates Mr. Mount?

A. Yes, log rates. It is the case entitled the Chattanooga Log Case.

Mr. da Ponte: What territory is that in?

A. That is in the Southern tre*e*itory, where the general rates are materially lower than in this territory, that is, the rates on other commodities. Applying those rates as increased by General Order 28 in Ex Party 74, the rate for 10 miles would be approximately 3½¢ but for ready reference we will use 3¢—or for more easy reference. Based on a weight of 9,000 pounds per thousand feet it would return a rate of $2.70 per thousand for transportation of 10 miles or less and a relative increase for the greater distance. Another case involving rates on logs is I. C. C. Docket 801-5, reported in 41 I. C. C. 431 and 433. In this case the Commission had under consideration the rates on logs in carloads from points in North Carolina to Norfolk, Virginia. It developed that for a number of years the Norfolk Southern Railroad had published rates on logs in cents per thousand [fol. 254] feet and on May 1, 1914 these rates were revised to a basis of cents per hundred pounds. The Commission found the rates proposed by the carriers were reasonable and were lower for like distances than rates on lumber, gravel, cement, scrap iron, and other low grade commodities, and in fact the Commission stated that the rates on logs were apparently lower for similar distances than the rates on any other commodities, and also found as we have demon-

strated here, that the logs must bear the return of the empty equipment. In reducing these rates from a basis of a thousand feet to cents per hundred pounds the carriers used a weight of 10,000 pounds per thousand feet, and for a distance of 14 miles the former rate of per thousand feet was $1.75 which was reduced to a cent and three-quarters per hundred pounds. The former rate. By using the division of 14,000 pounds claimed by the shippers the rate would be 1.4¢, but the Commission, disregarding the weight basis used by the carriers or those advanced by the shippers, found that 1.¾¢ for 14 miles was not an unreasonable rate. Since that time this rate has been increased 56¼%, that is 25% twice, and today would be approximately 3¢ per hundred pounds and even though the rate was—the Commission found that the actual weight was higher than 10,000 pounds—it would give a higher rate per thousand feet than we could arrive at here by the use of 9,000 pounds, which is the average weight per thousand feet in this territory. We would have under this basis as applied by the Commission, as increased under the general rate increase in Ex Parte 74 a rate of 2.40 per thousand feet.

The Director: We will adjourn until 1:30.

1:30 p. m. the hearing continued, all parties present as before. Mr. J. W. Mount on the stand.

The Director: You may proceed Mr. Mount.

[fol. 255] A. (Continuing:) When I left off prior to the noon adjournment I was discussing a decision of the Commission in Docket 8015 reported in I. C. C., 431 to 433. I had made an explanation of the Commission's findings there with respect to some log rates applying from points in North Carolina to Norfolk, Virginia. I believe I had explained the rates found reasonable by the Commission and the basis of those rates as in effect today for 14 miles. The same explanation would apply to the other distances involved in that proceeding. Further commenting on the Commission's decision in the Chattanooga Log Case reported in 30 and 35 I. C. C., it states there that the more recent decisions involving log rates as decided by the Commission are in 58 I. C. C. 421, in which the Commission upheld their former decision in connection with rates on logs from —— to Boligee, Alabama, and Chattanooga, Tennessee. I would like to refer to the Interstate Commerce Commission's decision in I. & S. Docket 1235 reported in 60 I. C. C. 350 et seq. which went to the reasonableness of rates on sawlogs between points in Michigan and Wisconsin. That is a very recent decision, decided February 29, 1921 and involves the cancellation of a certain low commodity rates on sawlogs from points on the C. M. & St. P. Ry. and the Wisconsin Northern Railway in Northern Wisconsin and Michigan to Wisconsin points, when manufactured and reshipment of the product by those lines. The comments of the Commission in that case are very interesting and there is one point I would like to call particular attention to and that is the fact

that the shippers show in that case that the increased rates proposed by the carriers range as high as 129% increase above the rate that was in effect on June 24, 1918, and commenting on this point the Commission says: "But if the rates proposed by the carriers were just and reasonable, the percentage of increase over the rates formerly in effect means very little." Now undoubtedly there will [fol. 256] be instances here where loggers will present testimony that they have made contracts on the present basis of rates, and in considering this subject I would cite the decision of the Commission I. & S. Docket 284 reported in I. C. C. 29 page 136. The Commission stated in this case as follows: "The fact that contracts have been entered into on the basis of a lower rate will not of itself preclude the increasing of such rates." Their decision is based on the decision in Southern Company vs. Interstate Commerce Commission 219 U. S. 433 and 450. Among the same lines comments will undoubtedly be made as to their influence in this case and I refer to the decision of the Interstate Commerce in I. & S. Docket 260, entitled The Duluth-Minnesota Log Rates, reported on pages 420 to 423, of 29 I. C. C.

Mr. da Ponte: That last case was what?

A. I. & S. Docket 260; 29 I. C. C. 420 to 421. This case involved increased rates on logs from points in Minnesota on the main line of the Great Northern Railway to Superior, Wisconsin, and commenting on the case the Commission had this to say——

Mr. Henderson: We want to object to the witness reading into the records decisions of the Interstate Commerce Commission. We have no objection to their citing these for comparative purposes but we are going to have to pay for a record and we don't like to pay for reprinting and re-typing decisions of the Interstate Commerce Commission. We think it proper for the witness to cite testimony but we think it incompetent for the witness to quote testimony given in some other case which can be done by briefs.

Mr. Robbins: The witness is giving the citation and is just giving enough of the salient features so that you can judge from what is said what is involved in the case. He is not encumbering this case, he is making no lengthy comments on the cases.

[fol. 257] Mr. Carey: I see no reason why we should depart from the customary method of introducing evidence. The citation of these cases is simply argumentative. There is no evidence to it.

The Director: You may omit any quotations or argument in relation to the cases but for our own benefit we would like to have the citations.

Mr. Carey: The entire purpose can be served if counsel or the witness at this time will call attention to the case and filing a memorandum of the decisions.

A. They have been very gladly received by the Interstate Commerce Commission and I thought for the benefit of this Commission they would be glad to have them.

The Director: We will not exclude any citation of the cases but in the way of argument we will look that up ourselves.

A. I will then merely read the extracts from the decisions without any comments on them.

The Director: I don't think we ought to encumber the record with extracts from the decisions or comments upon them, that can be submitted in form of briefs.

Mr. Dudley: That is true, if your Honor please, but you will recall that one of the counsel for the loggers was requesting a witness to produce certain rulings of the Interstate Commerce Commission to which he made a general reference.

A. The other gentlemen that objected here before, didn't, he asked for it——

Mr. Henderson: I only objected at that time the same as I am now objecting, as to what the Interstate Commerce Commission said. I am making the same objection now and I did say that the witness could cite this Commission to that particular ruling; but the objection I am making here is the same objection that I made yesterday.

[fol. 258] A. I understood you yesterday to object because he didn't have the citations, and now I am trying to bring them to you.

Mr. Carey: I don't see that it makes any difference what the Interstate Commerce Commission said about anything, what we are here for now is to take testimony and we will all make our arguments afterwards, if we have anything to say on the subject.

Mr. Dudley: Will counsel for the loggers agree whether they do or do not want the citations? One of them wants them and the other objects to them, but we are completely willing whether they do or do not, if they will agree among themselves.

Mr. Henderson: Now I resent the imputation that anybody here is dickering; we have all asked for the citations but we have all said that the wording should not be copied into the record.

The Director: Well we have ruled on that; you can give the citations, Mr. Mount. It is not necessary to read them into the record.

Mr. Welsh: Yes, give us your brief after we get through.

Mr. Robbins: Something has been said here about charging for picking up logs, is any tariff charge published on our line?

A. No sir.

Q. Has any tariff been published as far as you know covering the extra charge for bunks or anything of that kind?

A. Some of the roads here publish a different rate for handling shipments on cars equipped with patent bunks. The O. W. R. & N. do not. Since the Commission has ruled out the testimony as to the citations etc. that will conclude my case.

The Director: Well you can submit that in the form of a brief.

Cross-examination.

Mr. Carey:

Q. Mr. Mount, you have made some calculations and one of them [fol. 259] resulted in a base rate of $2.70 for a distance of more than 10 miles?

A. Yes, based on the decision of the Interstate Commerce Commission, as rates that they found reasonable.

Q. In comparison with other low grade commodities?

A. No, the $2.70 rate that I quoted was the rate that was found reasonable by the Interstate Commerce Commission.

Q. Now what is your idea of the method of progression in building up a scale of rates from that, should your rates vary in 10 or 5 mile jumps?

A. For shorter distances the rates should vary in 5 mile, and for longer distances in 10 mile jumps.

Q. And where should the change take place?

A. Well so far as our line is concerned I think it should start at something like 20¢, for instance for the first——

Q. Well, suppose you just carry out that rate on that scale, on the basis of $2.70, and carry it up to say a mileage of 60 miles, so that we will have the some view of what such a scale will result in?

A. Well I am not advocating that scale, I was just stating that that was what the Interstate Commerce Commission found as a reasonable rate for the transportation of logs.

Q. You are not suggesting that then as a rate to be adopted by this Commission?

A. I am just saying that that is what the Interstate Commerce Commission considered a reasonable rate for a 10 mile haul.

Q. I am not so much interested in what the rate is as in the progression relatively. I don't care whether you start out at $2.70 or $2.80, but I would like to see what the ratio is between the initial rate and the rate for 40 miles.

A. I have not made a study of the rate of progression on that scale. Some other traffic man might disagree with me.

Q. I have no doubt that that is true, I have never seen two to agree yet, but I wanted your idea.

[fol. 260] A. For the next 5 miles, say from 10 to 15 miles it would be 25¢ per thousand additional to the base rate, and for 15 to 20 miles, the next progression, it would be about 20¢, and next 5 miles 15¢, and 25 to 30 miles 10¢ and on up to about 50 miles.

Q. Then you would take your ten mile steps from there on up?

A. No, from 10 miles up to 50 should be in 5 mile jumps.

Q. And how much additional?

A. Over 25 to 50 miles in 5 mile jumps, 10¢ per thousand for each 5 miles.

Q. Did I understand you to say that on your line you have no log movement in eastern Washington at all?

A. No sir. We have one or two log rates over there but they are obsolete and have not been in use for some time. We have no

intrastate movement in Eastern Washington. We have a substantial interstate movement from Idaho points to Spokane

Q. But that does not come in contact with any intrastate movement?

A. No, we have no intrastate movement.

Q. And of course your Eastern Washington interstate movement has no relation to your Western Washington Movement?

A. Well the rates over there are just about on the same basis as they are here. The people that ship over there refer to our rates here on the coast and we have been governed largely in the making of our rates. About the only difference is in the minimum weight. We carry a minimum weight generally of about 8,000 pounds over there as compared with 7,000 pounds in Western Washington.

Q. That is due to the difference in the character of the timber?

A. Yes, the dimensions of the timber there has something to do with it.

Q. I understood you to say in your direct testimony, maybe not in these words but it conveyed the idea, that in your judgment [fol. 261] as a traffic man this log rate situation should be viewed as an entirety, that is by taking the industry into consideration rather than of isolated instances?

A. Yes, what I had in mind was that the entire line should be taken into consideration. I said that undoubtedly there were certain movements on branch lines of the transcontinental carriers where they would be entitled to a higher return in handling the log traffic than on other parts of their line, and in view of the general conditions of the lumber industry and the competition they have to meet, and they are competing in the same general territory I think we would have to throw the tail in with the hide, so to speak, and put the log rates on one uniform basis for application over the entire state.

Q. Now a few moments ago you said you were not advocating a scale of rates based on this initial rate of $2.70. I presume you had in mind that for practical purposes it would not be advisable from both the standpoint of the railroads and the loggers to undertake to adopt that——

Mr. da Ponte: I want to object to that. As a mater of law the Commission is concerned with fixing a reasonable rate within legal limitations. Any rate which the carrier makes under the cost of operation must be volantary on its part, and we don't think it proper to ask the witness what he would consider a rate should be.

Mr. Carry: Counsel does not want their own traffic man to give his evidence, to give his admission or whatever it might be——

Mr. Robbins: I will withdraw the objection if it will do any good.

A. I can answer the question this way, that what I had in mind was, I was just citing the $2.70 rate to show what the Interstate Commerce Commission had found reasonable in other territories where the general level of rates were lower than in this territory.

I didn't want it to bind me as being a reasonable rate in this territory, but to show that the Interstate Commerce Commission in other [fol. 262] territories where the operating conditions are very favorable and where the general level of rates are lower than they are in this territory, have found that those rates were reasonable on interstate movement.

Q. Those rates were found reasonable in view of the conditions that existed in that territory for which the rates were prescribed?

A. Yes.

Q. And those conditions may or may not be similar to conditions which prevail in the State of Washington?

A. Well some of the cases I cited—in some of the cases the conditions are similar—the comparison of rates on other commodities, which the Commission had in consideration, were the same that I have used in this territory.

Q. Now have you any personal knowledge as to the log conditions in Tennessee, that would be Eastern Tennessee, in Chattanooga, I think it was?

A. Yes.

Q. Where this $2.70 rate I think was applicable?

A. Yes, I was born and raised in Nashville, Tennessee, and that was the first railroad that I ever worked for, and Chattanooga was in Eastern Tennessee. I am not as familiar with rates in that territory as I am in this, but I am very familiar with the construction of the road and very familiar with the difficulties that they had to meet in their operations——

Q. In view of that knowledge would you say that the rate in Eastern Tennessee would necessarily be any criterion as to what the rate ought to be in Eastern Washington?

A. Well it is merely evidentiary that in a territory where the general level of rates are lower on all commodities in general than they are in this territory, that the Commission has found that a rate of $2.70 was a reasonable rate for the transportation of logs.

[fol. 263] Q. Well of course what this Commission is concerned with in the end is, what rates should be put in to apply to Washington traffic. Now is it your idea that the Commission, taking into consideration the welfare of the railroads and also the welfare of the industries would be justified to putting in any scale of rates on an initial rate of $2.70 per thousand?

Mr. da Ponte: I want to object to that as argumentative and as a question of law. To make myself clear this is our position: That the Commission is bound by the rules of law and the Constitution as construed by the Supreme Court. Now neither this Commission nor a Court can force the carrier to put in a noncompensatory rate for the movement of this or any other commodity, but the carrier does not labor under that limitation, and if a traffic man for considerations of enlightened public policy sees fit to put in a rate below what can legally be required, it does not follow that the Commission should do that or a court should do that. Now your Honors sit as a tribunal and Mr. Carey is simply examining the witness as to what he might

consider proper in view of the industry and things of that kind, which does not throw any light upon what the Commission or a court ought to do. I think that is well sustained by the Court decisions.

The Director: The objection is overruled. You may answer the question.

Mr. Dudley: You asked for information if the Commission please. The legal rule is, that parties inquiring on cross examination as to collateral matters the party is bound by answers of the witness brought out in cross examination on collateral matters. I want to know if that rule is to be applied?

Mr. Carey: You won't find any such rule in vogue in this state and particularly you won't find any such rules——

The Director: Mr. Mount is a traffic man and has given his views on what would be reasonable rates and counsel is entitled to cross examine him on those points. His answers do not bind the Commis-[fol. 264] sion or any one else but we would be glad to have his views.

Mr. da Ponte: I don't think he is cross-examining him on that point, that is what I mean.

A. Counsel asked me if I considered that a reasonable rate?

The Director: You may answer the question.

Mr. Carey: My question was this, if I recall it, in view of the actual conditions as you know them to exist in Washington and the necessity of the Commission prescribing a scale of rates for Washington would you think it would be in the interest of the carriers or in the interest of the loggers either, to prescribe a scale of rates with $2.70 per thousand feet, being the initial rates?

Mr. da Ponte: Just note our objection to that.

The Director: Objection overruled.

A. Well I will answer that in t-is way, that I have not made an investigation as to what effect a rate of $2.70 as an initial rate would have on the movement of logs. However if our investigation shows that the traffic wouldn't move freely under that or would place a handicapp on the logging and lumber interests which they could not surmount, I would not advocate a rate of $2.70 per thousand.

Q. And the mere mention of a $2.70 initial rate immediately suggests to your mind that possibility of such a scale of rates coming on the traffic?

A. Not necessarily. From a strictly operating standpoint and a comparison of rates with other commodities, a rate higher than $2.70 might be a reasonable rate in this territory for the transportation of logs. But as you state business is in a very demoralized condition apparently at this time on account of conditions not directly connected with the transportation business, but due principally to economic and banking conditions over the country and I would not [fol. 265] feel disposed, as a traffic man wanting to build up business, putting in a rate at this time of $2.70 per thousand.

Q. As I understand from the testimony of a prior witness you are going to supply definite figures later but right now can you give us the benefit of your best judgment as to what the average log haul is on your line?

A. Per day?

Q. No, the average length of haul.

A. The average length of haul, you could figure that from my exhibits there. I show you the haul for all movements in 1919 and 1920. You can strike an average.

Q. You can figure it out quicker than I can.

A. It will require some computations though. You add up the number of miles and the number of movements.

Q. Well I don't care about it particularly, I didn't know but what you had that in mind.

A. Well approximately 35 miles.

Q. Is that what you take to be the average on your line?

A. Yes, something like that.

Q. I understood you to say Mr. Mount, that it is impracticable to definitely fix a rate upon the basis of costs?

A. So the Interstate Commerce Commission have found and they are the ones that prescribe the m*e*hod by which the costs shall be ascertained, and it has been adopted by the state Commissions as their basis also.

Q. Notwithstanding they prescribed the accounting methods still they recognize that building rates upon the basis of any mathematical computation is not practicable.

A. Well they say that it is impossible to determine the actual cost of handling any commodity.

Q. Then you rather acquiesce in that do you?

A. Yes, from my 18 years' experience I fully acquiesce in that view.

[fol. 266] Q. So in your judgment then these tentative or theoretical rates to which Mr. Nicholson testified yesterday——

A. Well, as I understood Mr. Nicholson's testimony those rates that he advocated there were based upon the actual cost as it could be allocated, and didn't include a great many other items of cost.

Q. So that even from that standpoint, *their* being but a partial survey of the subject, his conclusions would not have any particular bearing upon the rates, upon what the rates should be?

A. Well so far as the actual cost of handling the traffic is concerned I think his testimony would have material bearing. He shows that by all the direct costs that you could allocate to the cost of handling logs it would begin, I believe, on a rate of $2.50 based upon the actual cost. But he did say there were actual costs he had not shown in there which he could not allocate.

Q. And if those additional costs were included then it would increase it and be certain to put it at a point where he would have very serious doubts whether it would not kill the traffic——

A. Well it might put it at a point where I as a traffic man would not advocate that rate at this time.

Supervisor Cleland: Do I understand you then that the rate on a particular commodity may be reasonable and at the same time not be compensatory?

A. No, I don't take that stand, for any rate that don't pay the out-of-pocket costs is an unlawful rate and puts the burden on other traffic.

Q. You think that these log rates should take into consideration the costs and the other items that enter into the costs, and upon those figures base the rates irrespective of whether it kills the traffic or not. Suppose we should find the cost would actually bring the rate up to $5.00 would you advocate putting in a $5.00 rate?

A. No, I would not, even though—well we want the business, see, but at the same time we don't want to run foul of the law. As I [fol. 267] understand the law it is unlawful to establish a rate which does not pay the out-of-pocket costs and throws a burden upon the other traffic, but I do believe the rate of $5.00 would kill the logging business.

Q. Well you see with a rate of $5.00 at this time, after paying depreciation, interest on bonds etc., how can we add that and at the same time permit you to move the traffic?

A. Well we can make a rate—I understand lower than you can compel us to make.

Q. In other words this Commission has no power to take into consideration anything except anything whether or not this rate is compensatory?

A. Well you can prescribe maximum rates I believe, and a carrier can establish the minimum rates, but it would not be good policy for the carrier even to establish a rate that didn't pay the out-of-pocket costs.

Q. Well it is your view that we cannot take into consideration what the traffic will bear, or the interests of the shippers or the people who are paying the freight?

A. Of course that is merely a matter of argument. I will leave that to my attorneys to argue that.

Mr. Carey: Has your company so far as you know collected any data which will show the actual additional revenues that has been derived as a result of the last 25% increase on the log movement?

A. No, but that can be very easily done.

Q. Were you figuring on producing a statement of that kind?

A. That is a statement we are going to prepare in accordance with Mr. Calderhead's letter of February 14, Item No. 1, which will show the movement in cars and feet and the load and the revenue thereon for the year 1920. It will break with the month of August inclusive, September to December inclusive, as the increased rates were charged after September first. We can get a fair comparison there.

[fol. 268] Q. What I had in mind, have you any exhibits or do you intend to present any exhibits that will show the actual conditions in dollars and cents?

A. Well it will amount to 25% additional.

Q. Well that is assuming that the movement is constant over some particular period?

A. Well our movement wouldn't vary 1,000 cars per year.

Q. So that you have a very regular, steady log movement?

A. In this state yes. We have handled about 15,000 cars a year in western Washington and then it runs around from 14 to 16,000 practically every year, that is for the last three or four years it has been running that way.

Q. You have no sand and gravel movement for comparison with it?

A. No we have a very substantial gravel movement in the construction of highways, they use quite a lot of that stuff, in fact we reduced the rates on sand and gravel during the period of federal control and they have not stood their 25% increase and yet it is materially higher than logs.

Mr. Henderson: Can you refer to that statement you read to the Commission from the Interstate Commerce Commission in which the Commission referred to the fact that some contention was made relative to the percentage of increase being not indicative of the reasonableness of the rate?

Mr. da Ponte: Wasn't that objected to?

Mr. Henderson: If they will strike that off from the record I will stop—I have the right to interrogate about it.

The Director: Go ahead.

[fol. 269] A. I have it.

Q. Now the statement there to the effect that comparison with the increase doesn't have anything to do with testing the reasonableness of the rates——

A. That is true it might advance 500%. If the rate is a reasonable rate the percentage of increase has no bearing on it.

Q. That same statement would be true with the rates in Washington, but not in Tennessee and if the rates in Washington are found to be reasonable and the rates in the other country was 500% higher that would not make any difference——

A. That is not what the decisions say.

Q. That if the rates in Washington are reasonable the mere fact that they may have rates somewhere else 50% higher would not have anything to do with the reasonableness of the rates in Washington?

A. That is all we are after and if we had a reasonable rate we would be perfectly satisfied and would not ask you to put in any other.

Q. You don't want to lose the business?

A. No sir.

Q. And you are losing money on it?

A. Yes.

Mr. da Ponte: He is not an accounting witness.

Mr. Henderson: He is one of the officers of the company and he stated that he didn't want to lose any of the business and I wanted to find out why.

Mr. da Ponte: This is horse play. We are standing on the objection. He is not offered as an accountant.

[fol. 270] The Director: I don't think that is cross-examination of this witness. He has not testified as to that before.

Mr. Henderson: The witness has testified that he doesn't think they are getting a reasonable rate and that the rate is too low and he has also testified that he doesn't want to lose the business, and he started out by testifying in the beginning that the Northern Pacific was serving the territory that they went into—they went into a territory that was already served to get this business, now it seems to me I have a right to interrogate him as to whether or not that rate is sufficient to justify them in keeping the business.

The Director: Well he can give any reasons that he wants to, but he has not given any cost figures or testified whether it is below cost——

A. I made my comparison with the rates on other commodities. I didn't use the cost method.

Mr. Henderson: Why do you think the rate is not reasonable?

A. In exhibit number 6 it shows conclusively that the logs returned about one-half to one-fourth the earnings of several other low grade commodities.

Q. I thought you didn't put in any figures with reference to that?

A. Where were you when I put them in.

Q. I was just informed that you hadn't put in those figures and therefore I was not cross-examining you. Now then as to what are you basing your conclusion on, by comparison with other rates?

A. Yes.

Q. Well you have no figures here to show whether or not those [fol. 271] other rates are producing more than a reasonable returns?

Mr. da Ponte: They are presumed to be reasonable.

Mr. Henderson: Are all the freight rates presumed to be reasonable, is that the idea, is that the reason that those rates on gravel and sand are presumed to be reasonable because all of the other rates are presumed to be reasonable?

Mr. da Ponte: Do you want me to be sworn?

Mr. Henderson: You have just testified.

Mr. da Ponte: I merely made the statement that it was degenerating into reflection on the gravity of this hearing.

The Director: Confine your questions to the witness.

A. Yes, I will say that the rates on other commodities we have used there are reasonable rates by the same standard that I view that the log rates are unreasonable. I compared those rates with sand and gravel and on interstate traffic on this movement——

Q. Have you ever tested them out to see whether they are producing the cost of operation and a return on the investment?

A. No, as I said before, the Interstate Commerce Commission has never required us in any hearing that I have been before them to try to produce the cost of operation, and the only case I recall, of any consequence where the cost of operation was considered the testimony was in the so-called Columbia Basin Rate Case and there was just as

much difference in that testimony there between the witnesses as there could be between light and dark.

[fol. 272] Q. And the O. W. R. & N. prepared a great big cost statement there?

A. I don't know.

Q. And you helped to prepare it?

A. No.

Q. And you took part in it?

A. No sir.

Q. And you state that the Interstate Commerce Commission has not required you to produce figures in a rate hearing?

A. No sir.

Q. They have not?

A. No sir.

Q. You voluntarily did it yourself whether the Commission required you to do it or not?

A. No, I never have in my life produced any statements showing the actual cost of carrying any commodity because it is impossible.

Q. But the O. W. R. & N. has informally presented not only before this Commission but before the Interstate Commerce Commission cost data with reference to transporting the different commodities?

A. So far as they could allocate them yes, and the majority of those figures are arrived at on an arbitrary basis, even at that.

Q. I agree with you on that. Now you have testified in answer to a question of the Commission that you understand that this Commission cannot fix rates which will not produce you the out of pocket costs and a reasonably return, is that your statement?

A. Now, I have been sitting here patiently listening to all this [fol. 273] without objections, I think there ought to be a limit some place. The law speaks for itself as to what this Commission can and cannot do. I don't like to object, but I think I will be compelled to under these circumstances. I think this has gone far enough.

Mr. Henderson: Now this witness has tried to tell this Commission what its powers were namely, that you cannot fix a rate which will not produce a reasonable return and out of pocket cost, now I say that there is no way of finding out what that limit is. If he says you cannot go beyond a certain limit I want to know if it is possible to find that limit that is going to shut the Commission off. I don't think this incompetent or immaterial.

A. Well I may say the best evidence of that is the statute book and the decisions of the court, that is better evidence than mine.

Mr. Henderson: But his opinion as to whether or not we can find that is probably better than the courts because courts don't know very little about accounting, but if this Commission is going to be limited by something, we are entitled to a man that knows where we are going to find that out?

Mr. Balmer: This man has not testified as to cost figures.

Mr. Henderson: There was no way of finding that out.

Mr. Balmer: Do you want to cross-examine him as to whether he knows that or not?

Mr. Henderson: That is what I wanted to find out.

Mr. Balmer: Well he has testified to it four or five times.
[fol. 274] The Director: I think this is merely repitition, the objection will be sustained.

Mr. Henderson: By what method do you judge the reasonableness of rates, by the costs or just by comparisons?

A. By a great many elements that enters into the establishment of a rate. One of the principal ones is the comparison of the rates on similar commodities, tarnsported under similar conditions.

Q. Perhaps that is assuming that the rates with which you are making the comparison are reasonable isn't it?

A. I said for similar commodities transported under similar conditions.

Q. And how are you going to determine whether the rate is reasonable with which you are making comparisons?

A. By comparing it with the rates on similar commodities moving under similar conditions.

Q. So that in your opinion the only way of finding out whether a rate is reasonable is by comparing it with some other rate?

A. Now I quoted you the methods followed by the law making bodies.

Q. Can you answer the question whether in your opinion the only way to determine the reasonableness of a rate is by comparison?

A. No, I don't say that is the only way, that is one of the many ways.

Q. Then the law doesn't settle that as the only way?

A. No they don't settle that as the only way.

Mr. Walsh: Referring to your exhibit number 7 in which you [fol. 275] have weighed the logs, you weighed those at Centralia?

A. Yes sir.

Q. Have you any personal knowledge as to where these logs came from or what kind of timber it was?

A. No sir. All the knowledge I have is indicated on the exhibit, that shows the number of the cars in which the logs were loaded, the gross weight of the car and the logs and the tare weight of the cars weighed empty. The net weight of the logs, the number of feet of logs on each car and the weight per thousand feet.

Q. The exhibit is in there—what I might say is there anyone here who would know what kind of timber it was?

A. No, I don't think so.

Q. I wonder if before we conclude this hearing you could get that information for us? I don't want to burden you, but one very material thing is the character of the ground, the locality in which it came from. It is much heavier than the heavy growth timber you see?

A. Well in making my computations here this shows the average weight of 9,600 pounds per 1,000 feet. In making my computations I only used 9,000 feet and I found when I got here yesterday I found that I didn't state this, it was nine pounds to the foot.

Q. Not seven in one localify and eight in some and nine in some?

A. Someone said he had nine pounds to the foot.

Q. Now one other thing some of this runs to 11,000 as far as that is concerned—well I think some of that does go above that, second [fol. 276] growth, and spruce grown in the rainy district will grow as low as 6½?

A. Well the preponderance of movement of lumber out of here, and I presume it would be naturally the same way with the preponderance of movement of logs as fir lumber, taking the movement as a whole which involves 95% or 98% of the movement of lumber in this territory is fir lumber, so naturally this movement of logs must be correspondingly high.

Mr. Clifford: I want to get some information. You stated, I believe that the level of the log rates was lower in the northwest than anywhere else?

A. Yes.

Q. Are you familiar with the stumpage values in the northwest and elsewhere?

A. No, I am not. I have heard a great deal of testimony in a case in Washington, D. C., before the Interstate Commerce Commission in the so-called Western Washington case and other cases but I don't recall what those figures were.

Q. Well can you compare it with the conditions in the south, is the stumpage value higher there or lower than it is in Western Washington?

A. I am not well enough informed on that to testify.

Q. Well would that be a consideration that should enter into the rates?

A. Absolutely not. The carriers are not held accountable by *low* or otherwise for what the commercial conditions are.

Q. I didn't mean it in that light, but in the light of the question asked you by the Commission of what the traffic would bear, if the [fol. 277] rate added to the cost of the logs, puts the value of the logs where it goes to market up to a point where it won't move and won't be taken out of the woods, isn't that a consideration that you would have to take into account as a traffic man in making your rates?

A. Well that is a consideration that I would take into account but would not necesarily have to Mr. Clifford. I will give you just one little citation on that, that is 33 I. C. C. 109 to 116, that involved a rate on logs and the Commission said "Saw logs are a low grade commodity the transportation of which for long distances may not always be logical or practical, but in so far as concerns the destination of the logs, the carrier has discharged his duty in this respect when it is accorded reasonable and non-discriminatory rates."

Q. I don't want to argue that case but I simply want to ask you if it is not a general proposition, Mr. Mount, that the value of the commodity is one of the great considerations entering into a determination of the rates?

A. It is not a great consideration, it is one.

Q. Well isn't the clasification of a commodity to some extent——

A. Yes, that is one of the transportation features.

Q. Now was it you or the other witness who compared the rates on canned goods and wool and other rates with rates on logs.

A. No, I was comparing rates on lumber—on transcontinental—with rates on canned goods and fruit and wool and other commodities that moved in this territory in which the log rates are abnormally low in comparison with other commodities.

[fol. 278] Q. Now in taking or making that comparison must you not take into consideration the equipment in which it moves, for instance canned goods and the other articles you mentioned would have to move in closed equipment, it is a closed haul and would increase your tonnage wouldn't it, isn't that a fact?

A. It would no doubt not move in open equipment but it is the open equipment that carries the 9,000. The flat car must weigh more than the box car. There is no standard or uniformity in this country by which you can apply that principle.

Q. The ordinary log flat which you would haul would it or not equal in weight the ordinary box car?

A. Well, it would not.

Q. Now canned goods and wool are more valuable commodities than logs?

A. Yes.

Q. And on that feature the hazard that you undertake is greater for those commodities than for logs?

A. Yes but the value of the commodity as far as risk to the company would have a very small bearing upon the difference in the freight rates. Now you can take our entire cost of damage for loss to canned goods, for instance, it would not amount to a fraction of 1% on the damage, if it did increase the rate 1% what have you done, you have increased it possibly one cent per hundred pounds, so you see the value of that covers the entire risk.

Q. However the value of the commodity itself does enter into the classification in the first instance?

A. Well it indicates this, the ability of the commodity to pay a high or low transportation charge, just the same way as the present [fol. 279] government tax; if I go down here and buy a $5.00 hat they say you are a poor man and you don't have to pay any tax, but if I go down here and buy a $15.00 hat I have to pay a war tax, and if I buy a $15.00 hat that is conclusive on the government that I am able to pay a tax.

Q. Well the rates on canned goods, that is a blanket from the Atlantic Seaboard to the Rocky Mountains——

A. Yes because we meet with very keen water competition where the movement is subsidized.

Q. Now wool moves practically to one market, to Boston, Massachusetts?

A. Yes, Boston, and Philadelphia they are the very largest wool markets in this country.

Q. Now in volume of traffic, how do logs compare with such commodities as canned goods and wool?

A. Well as to the movement the logs is the greatest.

Q. How much greater?

A. Well not so substantially greater on the O. W. R. & N.

Q. Have you any knowledge of what it is on the other lines?

A. No, they will have witnesses here that will testify to that.

Q. What about the expedition of the movement, compare the speed with which you must handle commodities such as canned goods, and logs?

A. Well canned goods move over very much longer distances than logs. We don't guarantee to handle any shipment on any particular [fol. 280] train at any particular time for any particular market, but it is on account of the exceedingly long haul on canned goods, and naturally they are handled further today than a carload of logs.

Q. Well from the standpoint of the requirements of the business do you or do you not have to handle canned goods at a rapid rate?

A. Well we handle them sufficiently rapidly to compete with our competitors here. We have a pretty good railroad that runs from here to Missouri and we guarantee to get them to Missouri as quick as the other lines get them to St. Paul.

Q. Are you sure that Mr. da Ponte will agree with you?

A. Well——

Q. Now I am asking you as a fair question whether or not taking these things into consideration it is fair to compare the rate level on logs with the rate level on other commodities?

A. I never made any comparison of logs with canned goods.

Q. Well I presume from what you said that you made such comparisons?

A. No sir, the comparison I made was rates on lumber with rates on canned goods and wool etc. I didn't compare the rates on logs because they would show that logs would return such an abnormally low rate compared with those commodity rates.

Q. Well it would not be a fair comparison would it?

A. No, not logs with a higher grade commodity of that kind.

Q. Because logs are handled under different conditions?

[fol. 281] A. Yes.

Q. Now calling your attention to exhibit that is numbered O. W. R. & N. number 6, the commodities that you have listed here, sand and gravel, brick, scrap iron, and cement, how much sand and gravel moves so far as equipment is concerned?

A. Well it moves in gondolas.

Q. And brick in the same equipment?

A. Yes sir.

Q. And scrap iron.

A. Yes, scrap iron either on gonds or box cars, any kind of equipment will do.

Q. Cement?

A. Well any of those commodities you mentioned can move in any kind of equipment. You might not think it would apply to flat cars, but I have seen them put up sides to handle sand.

Q. Can you move cement in that kind of equipment or any kind of equipment?

A. Well in the summertime, it can be moved all right, but generally cement moves in box cars.

Q. The hazard of moving it in this western country in open equipment would be great?

A. Well it might be on cement, but so far as that point is concerned I can name numerous commodities that take rates twenty to fifty times as high as logs and move in open equipment. We have handled trainloads of automobiles on flat cars.

Q. Well so far as your statement, exhibit number 6, is concerned I am asking you if it would not be a fairer comparison for the revenue and the rates on cement shown here—if a comparison were made with the log movement showing the difference in equipment [fol. 282] that is used in the two services?

A. No, I don't think so.

Q. You have to haul generally a heavier equipment to handle cement than you do logs?

A. Well we will supply any equipment that is required. For logs we have to supply a special kind of equipment. We can move cement in furniture cars or box cars or any kind of cars, but these logs must by their *inherit* nature move only on log flats.

Q. But the *weat* is greater on the log flats?

A. But you are referring to rates on scrap iron, gravel and sand that can move on any kind of equipment as compared with only that kind of equipment for moving logs.

Q. Well any comparison to be fair would have to take into account these considerations would they not?

A. Those are very minor considerations.

Mr. Clifford: That is all.

The Director: Any further questions of Mr. Mount? No response. That is all Mr. Mount.

Mr. Robbins: That is all the testimony we have on behalf of the O. W. R. & N. at this time.

Mr. Dudley: Before you leave the stand Mr. Mount do you know how the logs are scaled, where they are scaled?

A. Well, there is different methods in vogue on different roads, I believe they use the Spaulding on the O. W. R. & N. and the Scribner scale on the other lines.

Mr. Dudley: That scale calls for measurement inside of the bark?

A. Yes sir, inside of the bark.

[fol. 283] Q. And for a short distance inside of the wood?

A. Yes that scale allows for defects and hollows in the logs, and also for that part of the log which is not suitable for making lumber. In other words as I understand the method of scaling, so many thousand feet of logs represents the amount of lumber that can be made from that log, it doesn't include the waste material such as slab or the rotten part or the core of the log.

Q. Then notwithstanding a log may contain this waste material, that bark or rotten part or the defective material, the rates are paid on the good wood?

A. Yes, on the good material contained in the log only.

Q. The carrier gets no compensation for carrying this waste wood?
A. None whatever.
Mr. Hayden: That is to say the rate is fixed so that the rate applied to the good material carries also the waste material?
A. That is not so fixed, it is fixed on a thousand feet of good logs but in order to transport that we have to transport waste material.
Mr. Welsh: And do you scale down to the mechantable lumber, that is what the logger will eventually get?
A. Yes and in some instances I have even found that the log produced 25% more lumber than it scales.
Mr. Welsh: Send them down to our country it is just the reverse on the Milwaukee.

The Director: We will take a recess for five minutes.

[fol. 284] L. R. CAPRON, a witness produced on behalf of the Northern Pacific Railway Co., after being first duly sworn, testified as follows:

Direct examination.

Mr. da Ponte:

Q. Give your name and official position?
A. L. R. Capron, assistant general freight agent, Northern Pacific Railway, at Seattle.
Q. How long have you been engaged in the traffic service?
A. For nearly 18 years.
Q. Have you made a study of the log rates in preparation for this case?
A. Yes, I have been studying these log rates for a good many years.
Q. How many cars of logs is hauled on the Northern Pacific per annum?
A. Well in the State of Washington we handled about 100,000 cars of logs in 1920.
Q. Is the Northern Pacific, so far as you know the largest carrier of logs in the United States?
A. Well I don't know, personally, of any railroad that carries any more logs than we do.
Q. Now on what division are those logs being carried?
A. On the Tacoma and Seattle and Puget Sound Divisions principally.
Q. That is west of the Cascade Mountains?
A. Yes sir.
Q. What percentage of the log movement is west of the Cascades on the Northern Pacific and within the State of Washington?
[fol. 285] A. You mean the percentage of movement within the State of Washington?

Q. Yes.

A. I haven't figured that out. The movement east of the Cascades in the State of Washington is of no consequence at all compared with the movement west of the Cascades. The exact percentage I have not figured.

Q. In your study that you made is that with reference to the movement west of the Cascades?

A. Yes sir.

Q. And the insignificant movement east of the Cascades has no bearing on the general result and the conclusions reached?

A. No sir. The situation is entirely different east of the Cascades.

Q. Now have you seen the Commission's exhibit A?

A. Yes.

Q. I wish you would refer to that exhibit and make such observations as occur-ed to you concerning the log rates structure as shown there?

A. Well there are some rates shown in that exhibit that are still in effect on the Northern Pacific that should be taken out, as the operation has been discontinued, such as four rates as shown from Mack, Northern Pacific rates on page 1.

Q. Item 70-B?

A. I don't understand that numbering there, there are three rates there—four.

Q. All numbered 70-B and all from Mack to various points?

A. Yes. The general inconsistency of the rates for equal distance, that is shown by this exhibit results from the manner in which [fol. 286] the log rates were originally made, the conditions that control the making of those rates in the early days. The Northern Pacific, the first transcontinental carrier, came into this territory and had very little traffic of course in the beginning, and that was particularly true as to east bound traffic. We were hauling empty cars east bound all the time and we went to a great length to stimulate some east bound tonnage that would fill those empty cars. We also owned a great deal of timber that we were anxious to sell and get cut, and many rates were made in those days that were a part of the consideration of the selling of the timber. In other words we made rates then that involved considerations that would be considered improper under our present regulatory laws. And then there were also other conditions, such as you find in connection with rates shown here under item 75, Weatherwax to Aberdeen, a rate of 94 cents, which was originally a 60 cent rate. Mr. Mount mentioned that rate. It was a case where a road was going to build across our line, build across the main line to the Grays Harbor, to put the logs into the river, and the operating department didn't like that and we made a rate that we figured on about what these people said it would cost them to float the logs down the river.

Q. And they agreed to abandon the proposed road across our line?

A. They did.

Q. And for what period of time do these rates date back that you first established, that you are talking about?

A. I couldn't tell you offhand the date of any particular rate.

Q. Was it about 1888 that you know about?

A. Well I was going to say I think they probably started a little [fol. 287] earlier than that, but I cannot testify. It was prior to 1890. I can't say that positively.

Q. And have these rates been continued on about the same general basis, aside from the general advances that have been put in since that time?

A. Yes sir.

Q. Now take for instance the rate covering the movement of the St. Paul & Tacoma Lumber Company's logs, between what points does that apply as shown on the exhibit?

A. Well there is a rate from Puyallup River to Buckley and Tacoma.

Q. That is marked in the margin T. F. F., 13-E in the margin?

A. Yes you will find that rate shown both under single car rate and the trainload rate.

Q. That names a rate from the Puyallup River or Buckley to Tacoma of $1.66½ doesn't it?

A. Yes sir.

Q. In trainloads, minimum 6,000 feet, distance 29 miles?

A. Well it is ten or more cars.

Q. Distance 29 miles. Now could you state the origin and history of that particular rate?

A. That was a contract rate.

Q. With whom?

A. With the St. Paul & Tacoma Lumber Company. That is just an example of one of the rates that I mentioned that was connected with the sale of the timber.

Q. What was that rate originally?

A. $1.00 I think.

[fol. 288] Q. And the present rate is produced by adding the two general advances?

A. Yes.

Q. Do you know the date of that contract?

A. It was in the eighties.

Q. In 1888? Now to what extent has that rate served, do you know Mr. Capron, as a criterion of other rates in force?

A. It has influenced our other rates in this territory, not only ours but rates on other lines.

Q. And has kept them down to about the same basis, hasn't it, generally speaking?

A. No, not the same basis. We have lots of rates that are higher for equal distances.

Q. To what extent has these special commodity rates—do you carry any special commodity rates on logs?

A. Yes.

Q. To what extent do you carry those rates, I wish you would point out some examples?

A. Well this exhibit makes a very complete showing of the special commodity rates. These are all special commodity rates. Our distance rates are shown on page 2.

Q. And what explanation do you give here as to why these rates were put in lower than the distance basis?

A. Why I have given a general explanation.

Q. Because of these conditions, the contracts, etc.?

A. I can't take each and every rate on this exhibit.

Q. Well the explanation you have given is the rason why the special commodity rates have been given lower than a distance basis?

[fol. 289] A. I have given the general explanation, yes.

Q. Now what have you to say Mr. Capron as to the inherent reasonableness of these rates as shown in this exhibit?

A. They are all very low rates, and we have felt for a good many years that they constitute a big leak in our revenues. In other words we have not felt for some time that we were getting the cost of the service.

Q. Well on what was that predicated, what justified that conclusion?

A. The conclusion was predicated on a comparison with the revenues that we received from the handling of other commodities, the rates that were made and successfully maintained on the same commodity in other parts of the country, and the exceedingly low revenue per car as compared to the revenues received from other places, and the information that we obtained from time to time for our operating department as to the hazards of the traffic and the excessive cost of maintaining the equipment.

Q. Mr. Mount offered an exhibit number 6, do you consider those fair and reasonable comparisons to be made with the log rates on those commodities, that is a proper comparison?

A. For the purpose for which they were presented I think they were fair as they illustrated the difference in the revenues that we received on logs as compared with the revenue received from other low grade commodities.

Q. You have not made any exhibit along those lines, have you?

A. No sir.

Q. Now did you make an exhibit for comparing the log rates here in question with rates on logs in other states and sections of the country?

[fol. 290] A. Yes sir.

Q. Now please refer to your exhibit Mr. Capron and give your explanation and then hand them in for marking by the reporter?

A. This is a comparison of the log rates of the Northern Pacific applying in Washington, west of the Cascades, with rates in Minnesota and Wisconsin. I should have said the distance rates applying west of the Cascades. Of course, our special commodity rates are substantially lower. The Minnesota rates are all stated in sets per hundred pounds, and logs are weighed there where it is possible to do so, and where it is not possible charges are assessed upon an estimated weight of 10,000 pounds per 1,000 feet, which has been admitted by

the shippers in that territory to be a reasonable estimate. Several tests we made of the weight overran that figure. Now we always though- that those Minnesota rates were very low. As a matter of fact they are a perpetuation of the working into a distance scale of numerous special commodity rates that were made in the early days in Minnesota to meet the river drive.

Q. Well just briefly compared the two classes, showing the minimum and how they run briefly?

A. Well the exhibit speaks for itself.

Q. I think you had better give a brief comparison?

A. All right, the five mils rate is $1.56½ per thousand in Washington, $2.00 per thousand in Minnesota and $2.50 interstate from Minnesota to Wisconsin.

Q. That is your minimum?

A. That is the minimum. That applies to ten miles as well as to five miles. The 25 mile rate in Washington is $2.19, in Minnesota $2.50, into Superior $3.50.

[fol. 291] Q. Now explain the relation of those interstate rates to others, the other Minnesota rates?

A. Well, the Minnesota rates were fixed by the Minnesota State Commission under the so-called Cashman Law.

Q. On a mileage basis?

A. Yes, and since then they have been increased, of course.

Q. Well, the interstate rate does that cover substantially the same movement for which the rate is higher?

A. Well the conditions surrounding the movement are the same.

Q. And as I understand you exhibit then, the low Minnesota scale was due to the operation of that law and is comparable with what was permitted for interstate movement by the Interstate Commerce Commission?

A. Yes. The Cashman Law didn't fix any specific rate, it required the Commission to put everything on a distance tariff basis, and as I explained awhile ago they made the distance scale basas on a bunch of special commodity rates that we had had in force.

Q. I think that is a sufficient comment on that particular exhibit Mr. Capron, and I will ask that it be marked Northern Pacific's number 1.

Mr. da Ponte: Those complications we submitted in the beginning have not been admitted in evidence so this will be exhibit number one.

The Director: It will be admitted.

A. This is a comparison of Northern Pacific rates applying in Washington west of the Cascades with rates of three short lines operating in this territory. The tariff references are shown.

[fol. 292] Q. Those rates are substantially higher are they than the Northern Pacific rates?

A. They are.

Q. Does the traffic move under those rates, do you know, Mr. Capron?

A. Yes.

Supervisor Cleland: Are those logging rates?

A. Yes.

Mr. da Ponte: These are common carrier roads who filed tariffs with the Commission are they not?

A. Yes.

Mr. Henderson: Will you pardon an interruption until I find out whether these tariffs that you have on these exhibits are rates prior to August or subsequent?

A. They are present rates.

Mr. da Ponte: We offer that as Northern Pacific's exhibit number 2.

The Director: Any objection; it will be admitted, and marked Northern Pacific's exhibit number 2.

A. You will notice that in two cases there the shipper is required to furnish the equipment.

Mr. da Ponte: Is there any special comment Mr. Capron as to that exhibit?

A. No sir, I don't think any is necessary because as to two of these roads, at least, I believe the Washington Commission has full information as to their operation.

Q. Now refer to your next exhibit. I offer this exhibit as Northern Pacific's exhibit number 3, and ask Mr. Capron to say what it is?

[fol. 293] A. This is a comparison of log rates applicable on the Canadian-Pacific in British Columbia, with rates on the Northern Pacific applying between stations in Washington west of the Cascades. We show the Canadian-Pacific's special commodity rates and their distance schedule and we also show our single car distance rates and our ten car rates, which are special commodity rates. For the purpose of comparing our single car distance rates with the distance rates of the Canadian-Pacific we have reduced them to cents per hundred pounds, using the factor of 8,325 pounds per 1,000 feet. We will later introduce an exhibit which will show in detail how we arrived at that figure. I would like to call your attention to the fact that the tariff shows that the Canadian-Pacific doesn't furnish equipment for use in connection with their special rate, their ten car rate. With one or two exceptions these rates are all substantially higher than the rates on the Northern Pacific.

Q. Now as I understand this exhibit the Canadian-Pacific rate up to ten miles is five cents per hundred pounds?

A. That is their distance schedule. The special commodity rate then in force, which is a re-shipping rate, is $1.70 per thousand feet, with one exception, where they have a rate of $21.0- per 1,000 feet for nine mile movement. These tariffs carry the clause that "they are applicable only when the products is reshipped via the Canadian-Pacific Railway."

Q. You said something just now to the effect that the shipper must furnish the equipment under those rates?

A. Not under those rates that I have just been speaking of, but under the rates which are designated in that column as 10 car lots.

[fol. 294] Q. Is that schedule substantially higher than the Northern Pacific which you have compared?

A. Yes as a whole it is.

Supervisor Cleland: They are also substantially lower than the Wisconsin rates?

A. Yes. Of course you can appreciate that the rates we have in force here west of the Cascades, it is pretty difficult for the Canadian-Pacific to maintain any rates up there that are greatly higher than ours.

Mr. da Ponte: You think they are influenced by rates in this state which we make?

A. Yes.

Q. Very well go to your next exhibit which will be marked Northern Pacific's exhibit number 4.

(So marked, Northern Pacific's exhibit No. 4.)

A. This is a comparison of Northern Pacific log rates in force west of the Cascades with log rates of the Southern-Pacific Company in Oregon. They have many low rates on the Southern-Pacific in Oregon, but they also have a great many rates down there that are substantially higher than the rates applicable on our line west of the Cascades. You will notice the first column, the rate 10 miles or under, the highest rates that we have is a single car rate of $1.62½, while their rates run to $1.87½. As a matter of fact our distance tariffs applicable on single cars west of the Cascades is $1.66½. That $1.62½ rate being a special rate applicable outside of the territory covered by the distance tariff.

Q. Do Oregon and Washington lumber compete in the same market?

[fol. 295] A. Yes, they do. The Southern-Pacific adopted a somewhat different policy in Oregon from that that has been followed in Washington. Their low rates were made to the interior mills while they endeavored to keep up the rates to tidewater.

Q. That is, they would make that low rate to the mill where they expected to get the haul from the lumber?

A. Yes.

Q. Would the rates maintained by the Northern Pacific in Washington influence the Southern Pacific rates in Oregon?

A. Why I would say yes.

Q. That would be because the lumber from the two states compete in the same market in the East and other places?

A. Well, that would be the argument that a traffic man would have to listen to.

Q. Is there anything else you had to say in reference to that exhibit?

A. No sir, it speaks for itself. It is pretty complete. I don't think it is necessary to go through the whole thing and point out these different comparisons. You can do that in your brief.

Q. That is what I want to avoid. I think it is entirely proper and in fact necessary for you to give remarks on the important bearings on these rates, otherwise the attorneys would have an endless job?

A. I think I do that Mr. da Ponte.

Mr. da Ponte: All right. We offer in evidence Northern Pacific's exhibit number 5, please explain that?

A. This is a statement showing the comparison of rates applied on logs handled under transit arrangement by various other roads with rates of the Northern Pacific.

[fol. 296] Q. Have you any other explanation of the transit arrangement for the record?

A. Well a transit arrangement generally may be a number of different things.

Q. I mean as applied here to this proposition?

A. But this proposition applies when the outbound product moves over the line that handles the logs.

Q. In that case you rate is reduced?

A. In that case the rate is reduced. They are required to file a bond to insure the movement of the product out over the line that brings in the logs.

Q. Very well, explain the application of this exhibit?

A. The rates on there are in cents per hundred pounds and therefore for the purposes of comparisons we have converted our rates into cents per hundred pounds, using as a basis 8,325 pounds per 1,000 feet for the Washington logs. This shows the various rates, the various minimum rates in effect on the Southern roads running from two cents to four cents per hundred pounds where the transit privilege is used and from five to seven cents per hundred pounds where the transit privilege is not used as compared with 1.9 cents per hundred on the Northern Pacific.

Q. Now right there, should the Northern Pacific be compared with southern transit or non-transit rates to be a fair comparison?

A. I think they should be compared with both.

Q. There is no transit in this state on logs and lumber, is there?

A. There is no transit on logs in this state, no.

[fol. 297] Q. Well, isn't it a fact that the custom is and the uniform practice is to make the lower rate on the logs which move under a transit restriction of this kind, and where they move under non-transit unrestricted?

A. That is true in the territory covered by this exhibit.

Q. All right you may make any comment on that which occurs to you?

A. The only additional comment that I have to make is that the exhibit will show that the rates applied to the transportation of logs down in that territory are substantially higher than the rates that are applied on the Northern Pacific west of the Cascades, and there is a very substantial movement of logs under those rates.

Q. And they run from 50% to twice as high, do they not?

A. Yes they do. I might give a few figures as to the logs handled by those different railroads. The Louisville and Nashville during the first nine months of 1920 handled 547,172 tons.

Q. Could you give that in cars please so they will understand it better.

A. No, I can't give it in cars.

Q. Could you approximate it, about 30 tons to the car?

A. It runs about 25 tons down there.

Q. All right, then go ahead. They have dinkey cars down there?

A. The Gulf, Mobile and Northern for the same period, that is a small road ran 87,170 tons. The Missouri Pacific for the year 1920, 1,578,528 tons. The St. Louis and Southwestern, the first nine months of 1920, 111,438 tons. The Kansas City Southern for the same period 78,835 tons. The New Orleans and Great Northern, the only figures they had were for the year 1918, went 118,139 tons. The Illinois Central and the Y. & M. (which is a subsidiary) totals [fol. 298] 1,281,596 tons for the first eleven months of 1920.

Q. That last would be over 50,000 cars on that road alone for those eleven months would it not; dividing 25 into 1,282,000—it would be over 50,000 cars?

A. I haven't figured it out but that would be an estimate.

Q. That is a greater movement I believe than the Great Northern handles, for instance in this state?

A. I don't know what the Great Northern figures are.

Q. Is it about one-half of the Northern Pacific?

Mr. Henderson: He testified something like 100,000 didn't he?

A. Well, then it would not be one-half of the Northern Pacific.

Q. How many did you figure 48,000 cars?

Mr. da Ponte: They moved over 50,000 cars in eleven months?

A. Well that would be one-half the number of cars all right, but it would not be one-half of the tonnage that we would average because our logs run heavier to the car.

Q. Now taking the rate structure in that territory, generally speaking, is it substantially higher than it is in this territory, I mean lower—it is substantially lower, isn't it?

A. Yes.

[fol. 299] Q. So that there is a far greater disproportion between the log rates in Washington as compared with other rates than there is in this territory between log rates and other rates?

A. Yes.

Q. In other words in that territory the log traffic is bearing much more nearly its proportion of the transportation charges than in this territory?

A. I would say they are from these figures.

Q. Anything else in connection with that exhibit?

A. The Southern roads don't assign any equipment to the log service, and they make no special assignment.

Q. Another thing is that that is smaller timber, isn't it than we have out here, a good deal?

A. Yes, I should say so. I don't think anybody has any bigger timber than we have west of the Cascades.

Q. Consequently your car repairs and such things as that would not be as heavy in that territory as in this?

A. Well, that would be my opinion.

Q. Well have you any other exhibits?

A. Yes. This is a comparison of the log rates on the Southern Railway with the Northern Pacific rates west of the Cascades. We have shown these separately for the reason that the Southern Rail-

way does not carry any transit arrangement. They simply have in rates on logs and out rates on lumber, the same as we do. Their rates are different in different districts, and the minimum rate runs from 2½ cents to 5 cents per hundred as compared with out minimum rates of 1.9 cents converted on the basis that I mentioned a while ago. That is the minimum rate under the distance scale. [fol. 300] They figure on a basis of 10,000 pounds to the 1,000 feet down there and therefore that minimum that they have of 2½ cents would figure $2.50 per thousand, and their maximum of 5 cents would be $5.00 per thousand. You will also notice that the rate in the first column which run from 3 cents per hundred at five miles to 4 cents at twenty-five miles and 5 cents at fifty miles were fixed by the Interstate Commerce Commission in May, 1918. The citation is on the exhibit. I don't want to repeat it. Of course, to the figures fixed in 1918 we have added the general increases.

Q. Those rates run over 50% right straight through higher than the Northern Pacific rates do they?

A. Yes sir.

Mr. da Ponte: Let that next exhibit be marked number 7.

(So marked.)

A. This exhibit shows how we obtained the average weight per 1,000 feet which was used in the former exhibit for the purpose of reducing the Washington rates to a cent per thousand pounds basis. I don't think there is much explanation necessary because the exhibit shows where the weight was taken and the class of logs weighed. It includes practically all character of logs shipped in this territory.

Supervisor Spinning: I notice under the head of mixed fir and cedar from Tacoma you have the weight of 9,172 and the same mixture from Everett you have the weight of 7,729.

A. Yes.

Supervisor Spinning: Was the mixture in light proportions in both cases?

A. Evidently it was not. I think that is another illustration, Mr. Spinning, of the fact that we have pretty near all kinds of weight [fol. 301] in here to make up a pretty fair average.

Mr. da Ponte: And these were the figures you used in reducing these other rates and our rates to cents for comparison?

A. Yes.

Q. Now have you completed the exhibit that you prepared?

A. I have completed the exhibit that I have prepared to introduce at this time. I did want to put in some other exhibits but they would be predicated to a large extent on the accounting exhibit that we could not talk about until they were properly introduced here and so this is all I can do now.

Mr. da Ponte: Are those comparisons you have made with rates carried on logs in other states representative of the other log rates Mr. Capron?

A. Well now those are the rates in the other states.

Q. And you put them all in?

A. Yes. I didn't cover the entire United States by any means.

Q. You did cover the lumber producing districts pretty well?

A. I covered the Minnesota districts and the districts which produces the timber with which we are told the producers in this territory have to compete.

Q. Well passing from that I will ask you to state whether you have examined the log movement in this state and if so what do you find with reference to the cars of logs which are moved on a rate of $2.00 per thousand or higher?

A. I figured that out last night.

Q. Have you that memoranda or not?

A. No, I have not the memoranda but I remember the figures for the last three months that we had, that is after the rates had been increased as I remember the figures I got last night it was approximately 7,500 cars out of 23,000 and something.

[fol. 302] Mr. da Ponte: I will read you the memoranda to see if it refreshes your memory as to what you are testifying: September, October and November of 1920, 7,509 cars moved on rates of $2.00 or higher out of a total movement in that same period of $25,210, is that your recollection?

A. Those are the figures that I gave you and they are correct.

Q. Now what does that indicate to you as a traffic man, as to whether this log traffic can well take the $2.00 minimum rate.

A. It indicates that the log business is moving at those rates.

Q. It is not destroying the movement?

A. In looking over our figures of the movement I was quite interested in noting that approximately 37% of our log movement is to interior mills and approximately 63% to tidewater mills.

Q. What is the bearing of that on the question?

A. It indicates the chances we have to lose on outbound traffic of lumber.

Q. The logs that move to tidewater mills and rail lines will probably lose the lumber haul?

A. Why that is what the lumber men are telling us.

Q. Do you know what the average per ton-mile revenue from the log traffic was?

A. The average ton-mile revenue, yes. For January to August, 1920, it was 11.22 mills and from September to November inclusive 13.53 mills.

[fol. 303] Q. What is the same figures as applied to all other intrastate traffic?

Mr. Henderson: I might say Mr. da Ponte we have looked over the figures that the Northern Pacific submitted to the Commission and we will withdraw our objection to their introduction, that is the people that I represent, the associated loggers.

Mr. Welsh: We will join in that withdrawal.

The Director: I don't understand.

Mr. Henderson: We have looked over the figures submitted by the

Northern Pacific and offered as an exhibit to which we objected because we didn't have an opportunity to investigate them and we now withdraw our objections.

Mr. Balmer: Does that apply to the Great Northern exhibits also?

Mr. Henderson: Yes, we will make that withdrawal to the Great Northern exhibits also.

Mr. da Ponte: I will probably need someone to explain them anyhow, and they may be considered in evidence. Well I might offer them formally and give them the proper numbers and have someone explain them.

Mr. Balmer: As for mine I have already given them the exhibit numbers and supplied the copies and I now renew the offer that I made of them at the opening of the hearing.

The Director: They will be admitted. I think they are all in informally anyway, that is for the information of the Commission, except that they were not treated as exhibits.

Mr. Balmer: Yes.

The Director: They will now be regarded as exhibits in the case. [fol. 304] Mr. Henderson: We were advised that when they were introduced we would have copies and we would like to get the copies.

Mr. Welsh: We got the Great Northern but not the Northern Pacific exhibits.

Mr. da Ponte: The copies were not ready. I think perhaps they are now but I have not them with me. I left them to be completed at the general office.

Mr. da Ponte:

Q. State the same information in regard to the ten mile——

A. What was the question?

Question repeated as follows:

"Do you know what the average per ton-mile revenue from the log traffic was?"

A. Well for the first eight months of the year 1920 the average revenue per ton mile on traffic other than logs was 16.82 mills, and during September, October and November it ran 21.85 mills. The average haul on logs during the same period and during the first eight months was 31.2 miles, and on other traffic 99.2 miles.

Mr. Hayden: Intrastate or interstate or both?

A. Intrastate. For September, October, November the average haul on logs was 32.2 miles, the average on other carload traffic 101.3 miles.

Mr. da Ponte: Now as I understand it the figures for the other traffic includes logs?

A. Yes.

Q. Now as a traffic man I wish you would give your views as to what those figures show in favor of the average haul per ton-mile earnings as to the level of those log rates whether high or low, and [fol. 305] give your reasons, your explanation?

A. Well, I think it is obvious that they would have to be not only low but remarkably low where the ton-mile revenue produced is less, and your average haul is only one-third or less than one-third of the average haul on the other business.

Q. You have had a pretty wide experience have you not in dealing with questions of this kind Mr. Capron, attending hearings and such things?

A. Yes.

Q. Do you know of any other such showing applied to any other schedule of rates?

A. No.

Q. That is the record, isn't it of its kind?

A. Yes, in this territory at any rate, the territory with which I am familiar.

Q. So that take it from whatever point you view these rates the per ton mile basis or the car earning basis—did you state the car earning basis?

A. Well the car earning on the logs averaged during the first part of the year under the old rates $12.01 per car as against $56.50 on all other traffic, and during the latter part of the year when we had out 25% increase they averaged $14.95 per car as against $68.39 per car on all of the traffic.

Q. What period was that, did you give the period over which that applied, was that the same period as the others referred to?

A. Yes, the same as the others, the first eight months of the year, and then the next three months.

Q. To continue the question—so that we may view these log [fol. 306] rates, taking them from the traffic standpoint, or the per ton mile or on the car basis in comparison with any other rates, they stand alone at the bottom do they not?

A. Yes.

Q. Now from a traffic standpoint what have you to say in regard to the so-called trainload rates, the ten cars or twenty cars?

A. Well I don't know that I am sure what you mean exactly by traffic standpoint?

Q. Well disregarding the problems that the operator would have, I mean from the traffic standpoint?

A. You mean disregarding what might be the difference in costs of operation?

Q. Yes. We will leave the operating man to speak on that, but I want you to speak from the standpoint of a traffic man, as to its objectionable features if any?

A. Well the most objectionable feature is that which comes up during periods of car shortage, when we are unable to furnish the required number of cars. We can't afford to let a man hold cars at the camp there until he gets ten or twenty, because the cars are too valuable to stand around. We have to let him move the business, at the same time we find it hard to deny him the rate that is applicable to the twenty car lot For instance when he has ordered twenty cars and has twenty cars to ship and he tells us

it is our own fault that he doesn't ship the twenty cars, therefore we are in the position of hauling small lots at a rate that has been predicated on a trainload movement of a large lot.

[fol. 307] Q. So the upshot of it is that in times of shortage when cars are needed the carrier doesn't get the trainload but has to apply the rate on small movements of cars?

A. He has to apply that rate on small movements and then he has to listen to the man who is not able to offer twenty cars, we will say he may ship in about the same quantities as the other man is who has the twenty car rate—I mean on a given day.

Q. So that in practical operation then the large operator who is able to furnish that many cars and may consistently therefore demand them, ships a fewer number of cars at a less rate than the smaller operator who cannot furnish the trainload but does furnish about as many as the larger operator because of the carrier's shortage of equipment?

A. Yes, he has furnished about the same at a given time. Of course the larger operator gives you more business in the aggregate.

Q. But in that way a discrimination is created is there not?

A. Well that is what they claim, whether it is an undue discrimination is a question of law.

Q. Well isn't it a fact that it come to your notice that the rate is abused by shippers demanding more cars than they can use or more cars than they know the carrier can furnish?

A. It unquestionably can be abused. I have had no occasions come to my personal notice where it has been.

Q. What do you have to say as to whether or not that arrangement should be continued Mr. Capron, having in view the carriers' obliga-

[fol. 398] tions under the transportation act to treat all alike?

A. Well my opinion on that would not be worth very much. If we could get full trainload movements—I will say right now I don't see any excuse for a ten car rate—but if you could get full trainloads, really get them, there would be a reason from the carriers' standpoint, for making a lower rate, I think, but of course, these other things come up and we are prohibited by law from making such rates on interstate traffic and the most of the other states, such as Minnesota, has prohibited specifically by the Minnesota law from making trainload rates, and that is one of the things that makes the life of the traffic man a little more burdensome.

Q. Is it a fact that a trainload that has a number of cars on, that the number of cars that can be handled in a train will vary on various divisions and in various places from 15 to 50?

A. I cannot tell you but they will vary, of course, it is obvious that the number will vary.

Q. That is an operating problem, isn't it?

A. Yes sir.

Q. But do you know enough about it to say that if a trainload rate is to be established that it will have to vary in regard to the number of cars to meet those conditions?

A. It will.

Q. Well, it would have to wouldn't it?

A. If it was a real trainload rate, yes.

Q. Now about picking up logs, do you carry any charge against the shipper for logs spilled?

[fol. 309] A. There is nothing in our tariff on it, I don't think. No, we don't publish any tariffs for that.

Q. In fact you do not collect anything except for the mere transportation rates, do you?

A. We charge the transportation rate on logs that are picked up.

Q. That is all?

A. Yes sir.

Q. Now have you had any experience about collecting damages to car- from shippers that are accused of having unreasonably misused and damaged cars?

A. Yes, I have seen some such cases where shippers have refused to pay for damage caused to the equipment.

Q. Well without going into it much, as a practical matter, is there anything in that in dollars and cents to be carried into that item, as a practical matter do we collect any of it, are we able to get any of it?

A. Well not that I know of. I don't see all of it.

Q. I can say for the legal department that we have never been able to get any.

A. But they come around to the traffic department and try to get us to call you off.

Q. Is there anything else that occurrs to you at this time? Oh, I will ask you to state this, what effort has been made or consideration given the last year or two to the matter of putting these log rates on a more reasonable and compensatory basis Mr. Capron?

A. Mr. Mount, I think, explained that pretty fully; that is, he told how the move started, while the railroad administration was sad-

[fol. 310] dle, and how it was carried on up to the time when the carriers decided to drop the proposition.

Q. I want to get at this feature of it, do the carriers maintain these rates under present conditions such as have lately developed in the railroad world voluntarily and willingly or do they in a measure labor under necessities and difficulties in the matter—I mean as to whether or not the carriers desire to carry this schedule of rates on this basis in this state?

A. The schedule we have here at present?

Q. Yes.

A. No, they don't desire any such schedule of rates. As I say they have felt for some time that it is no longer justified, while there has been a great many difficulties——

Q. Well mention some of the difficulties confronting you in getting rid of this incubus of log rates as they have been maintained?

A. Well, I explained that some of those rates were contract rates, that we felt were way too low and no longer justified and at the same time we felt a sort of moral obligation to maintain them.

Q. It is a fact isn't it that the companies have been embarrassed by the moral obligation or legal obligation imposed by those contract rates?

A. Yes.

Q. Now there has been I believe a most radical change in conditions in railroad business since federal control ended?

A. There is no question about it.

Q. Now is this in a measure due to the fact that in late years the financial condition of the carriers has been such that they are [fol. 311] being now compelled to put these nonremunerative rates on a more reasonable basis?

A. Yes.

Q. Isn't it true that their attention has been last year or such a matter, particularly directed to the conditions as we find them in this log schedule in the effort to make a better showing?

A. Yes, that was particularly true when business was booming.

Q. Did you make an attempt to increase these rates by filing or suggesting a substantially higher tariff lately?

A. Yes, we did last year.

Q. What was the upshot of that flash in the pan?

A. Well it was interfered with by the general increase, that is, we didn't want to complicate that case by mixing in this feature, which was really a special one, on rates which we didn't feel bore a proper relation to general rates, and then after we got that out of the way it wasn't a great while before there was a general slump in our business, and there was some change of opinion among the carriers as — what ought to be done under the circumstances.

Q. Of course it took common action by all the lines, did it not to agree on a tariff?

A. Yes.

Q. Railroad rates generally speaking have latterly been in a plastic condition and being changed and remodeled since government control have they not, being raised and adjusted?

A. There has been a great many adjustments made and there has been one general increase since federal control.

Mr. Dudley: Turn to your exhibit number one, Mr. Capron, your [fol. 312] interstate rates shown on that exhibit, are those rates before or after this 25% increase?

A. Those are present rates.

Q. And the Interstate Commerce Commission rates shown in the third column, to Superior, those are present rates also?

A. Yes sir.

Q. Do you know whether they were installed first on the state or the interstate rate?

O. Installed first?

Q. Yes.

A. Well I couldn't testify to that.

Q. Were either of those rates installed as the result of a hearing had or an investigation had before they were installed?

A. There was a hearing involving the Great Northern rates into Superior, whether this is a scale that the Interstate Commerce Commission fixed for the Great Northern, I don't know.

Q. These are the rates over your road into Superior?

A. Yes. I cannot state positively whether they are on the same scale that the Interstate Commerce Commission fixed for the Great Northern into Superior or not.

Mr. da Ponte: They are the same as the Great Northern rates are they not?

A. I don't know.

Cross-examination:

Mr. Henderson: Are you familiar with logging conditions, that is, the manner in which logs are loaded in the forests?

A. No, that is not personally, of course anybody in this territory for any length of time hears a whole lot about it, but I never worked in a logging camp.

[fol. 313] Q. You were referring to trainload rates and referring to the fact that if the shipper demanded twenty cars and you were only able to furnish five, for instance, that you hauled the five at the trainload rate, and it caused you a loss in that way, that is you hauled the five cars at a less rate than you would ordinarily haul five cars?

A. Yes.

Q. Do you know or do you have any idea from your knowledge what would happen to a shipper when he has two sides going and needs 35 cars and you are only able to furnish him 15?

A. No, I don't know.

Q. You do know about railroad operations enough to know that he has a crew and all his overhead expenses there with a capacity for 35 cars and you can only furnish him 15?

A. Yes.

Q. So that the loss that the logger would suffer by reason of your inability to furnish the 35 cars would be practically the selling price of 15 cars of logs minus his stumpage, wouldn't it?

A. Well, of course, I don't know anything about it. I suppose that is something you ought to prove by a witness of your own.

Q. Now this application that you make of the rule where the shipper orders ten cars or more and you are only able to furnish five, that you will haul the five at the ten car rate, is only made for the period of a car shortage, isn't it?

A. Yes.

Q. And that is the reason you made it, was because you didn't have enough cars to furnish the demand?

A. That is correct.

[fol. 314] Q. And that is still the condition, isn't it?

A. That we have not enough cars?

Q. Yes.

A. Well, I don't think so. I will let one of our operating men answer that.

Q. You don't know as to that? You have not removed that provision of your tariff, have you?

A. No, we have not.

Q. And the tariff states that just as soon as you have enough cars that you withdraw that?

A. That is what it states.

Q. Now in one of your exhibits you refer to the ten mile earnings of commodities other than logs within the State of Washington?

A. Yes.

Q. I assume that you have in that all of the ton mile revenues within the state, which would include intrastate hauls, wouldn't it?

A. Those are one and the same thing.

Q. Interstate and intrastate I said?

A. No, that would include the intrastate business.

Q. And it would also include the ton mile business within the State of Washington, wouldn't it?

A. It should not.

Q. Could you tell by looking at your exhibit?

A. That was not an exhibit, except that was in the papers tendered by the Northern Pacific and from them you were reading, I think you gave the ton mile revenue on logs and the ton mile revenue on other business.

[fol. 315] Q. Then the figures you gave of rates per ton mile on all other traffic of 16.82 mills applied only to purely intrastate movement, is that correct?

A. Yes.

Q. Now with reference to the period covered by the year 1919, will you have figures available to give us the number of cars hauled in the year 1919 prior to the time when you had a split rate, that was prior to the time when you had the two rates, what I mean is in 1920 you had a period when you had one rate and in 1920 you had a period when you had another rate?

A. Yes, but we had these split so you can see what was done in each part of the year.

Q. Yes, but the part of the year when you had the high rate in might have been a time when the camps were shut down and not operating to full capacity, I want to get a period which would cover a period of years to which we could apply the ordinary rate?

A. Of course that would not mean much.

Mr. Calderhead: I can answer that question for you by saying that the auditor's office of the Northern Pacific can give you these identical figures from their records in their office in a very few minutes.

Mr. Henderson: We have not yet gotten them from any of the railroads except so far as they are shown here for the year 1920 from the Northern Pacific.

A. These figures had to be specially prepared. They are not kept in that form in the auditor's office.

Mr. Calderhead: They are kept so far as carload and joint mileage and traffic is connected, in the auditor's office.

[fol. 316] A. They are not separate, the only thin- they would have would be forest products.

Mr Henderson: So it would require special effort and considerably work to get at the records for 1919?

A. Yes sir. Now there is one thing that I might say in this connection about special effort, I happen to know, I was down there when they were getting out some of these figures. The auditor's office just had sufficient force to take care of the current business and any time they prepare anything special like this it means overtime work on the part of the crew at time and a half.

Q. Don't you think that in order to make a study of the log rates that it would be a very advantageous to have the total loaded cars over a period of years, the total loaded car miles and the total revenues and the total number of feet of logs in order to make a study of the log rates?

A. That would be very interesting, but to go that far and to get the board feet and the tons, we would have to go further to have it of any value we would have to see where the movements were, and after you got your figures why then you would scratch you- head and say what is the explanation of this, and you would have to find out what tariffs there were in this year that would not be in the next year and would never happen again probably. I really think that these figures such as we have presented are probably as good as you could get, because the movement of the traffic on the Northern Pacific will fluctuate from year to year. New camps are opening up and old ones are closed down.

Q. Now in attempting to make an application of a rate do you think that you can make a study of your rates generally and get a [fol. 317] level of rates when you have such a large number of different rates with such extreme variations, without getting the things that I suggested, namely the movements of your traffic——

A. We have given that.

Q. The movements are all in there?

A. Yes sir.

Q. And the rates upon which they moved?

A. Yes.

Mr. da Ponte: As I understand it Mr. Calderhead asked for such information as was needful for those purposes, and we have furnished all that. I think you had better see for certain whether that is not sufficient before you request any more.

Mr. Henderson: Well, it was my understanding in comparing the letter with the exhibits that all of the information was not all shown, but I have not compared the Northern Pacific as thoroughly as I have the others.

Mr. da Ponte: We have shown it all.

Mr. Henderson: You referred to efforts made to correct the logging rate schedules. A straight 25% increase of the schedules as you have now was no solution of the log rate situation in the State of Washington?

A. You mean the 25% increase added to what we had on August 25th?

Q. Yes.

A. No, that was no solution.

Q. Because of the wide spread you had in the different tariffs for the same service?

A. Well that is one thing and then another thing was we had simply perpetuated the relationship of the log rates to the rest of the [fol. 318] other commodities and therefore it didn't have the effect of bringing them into a proper relation.

Q. And if you had applied your distance tariff to all of your movements instead of so many of those low rates that you speak of as having been put into effect in an early period you would have received a great deal more money?

A. Yes.

Q. For instance you have one shipper with a very low rate that furnishes you with approximately one-eighth of your business, is that true?

A. I don't know offhand what the proportion is.

Q. But in any event the application of the distance tariff to all of your traffic would very materially increase your revenue, wouldn't it?

A. Yes.

Q. Have you ever made any studies to determine whether or not the application of your distance tariff—what amount that would produce, by the application of your distance tariff to your business?

A. No sir.

Q. So that you are not in a position to estimate the amount of money that your extremely low rates are depriving you of?

A. You mean the difference between what we get on these rates and what we would get if we applied the distance tariff to all traffic?

Q. Yes.

A. No sir.

Mr. da Ponte: However the exhibits will show that, won't they Mr. Capron?

A. Yes.

The Director: Is there any prospect of being able to conclude this [fol. 319] sitting this evening?

Mr. da Ponte: Why, I have some other witnesses here, Mr. Albee, who will take a long time, and the exhibits we were going to use in connection with his testimony are not in shape so I would have to recall him and I was going to ask to conclude with Mr. Capron at this time and then we can finish up.

Mr. Balmer: I have two witnesses, but I don't see how we could get through with them all today even by having a night session, and as I understand it, an adjournment is in prospect anyhow. Now it seems to be the most satisfactory thing to do would be to conclude the testimony of this witnesses, if that is satisfactory to the Commission, and then take an adjournment.

Mr. Henderson: We are not prepared to introduce any testimony until we have had an opportunity to go into all the exhibits that have been introduced, and it will be satisfactory to us if the Commission

desires to close the session now and take up the session again when we could get from the Great Northern and the Milwaukee the information the Commission has requested.

Mr. Dudley: You have the Milwaukee.

Mr. Henderson: The O. W. R. & N. is to furnish some additional information, and as near as we can find out the Milwaukee and the Great Northern have not furnished the information that the Commission requested, is that true Mr. Calderhead?

Mr. Calderhead: I have not checked the items.

Mr Dudley: We have fully responded to Mr. Calderhead's letter. There is no suggestion of any omission from him. Except that one item of tracing the carload movement, which we could not furnish, everything else is furnished.

[fol. 320] Mr. Henderson: Everything that you could furnish was furnished?

Mr. Dudley: Yes, those were put in on the first day of the session.

Mr. Henderson: Yes, but we could not find that they show everything that the Commission asked for?

Mr. Robbins: There are some additional matters that are to be furnished by the O. W. R. & N.

Mr. Balmer: Now if there is any additional information that the Commission wishes from the Great Northern I would like to be advised of it now or by letter, because we aim to furnish everything that Mr. Calderhead has asked for.

The Director: We will ask Mr. Calderhead to check up and notify the carriers of anything necessary.

Mr. Welsh: I understand that the Commission at one time asked the roads to file with the Commission information giving the contract rates?

The Director: Yes.

Mr. Welsh: May I inquire if that has been done?

The Director: I don't know whether all of it has been furnished or not. We have received some of it.

Mr. Welsh: If it is not yet in, at this time I want to give notice to the carriers that before this proceeding is closed finally we will expect to go into those contract rates and find out what they are and we would like to have the information on hand to cover that.

Mr. da Ponte: We have already explained to you what they are. Mr. Capron is here for you to examine him.

Mr. Welsh: Does Mr. Capron know all about them?

The Director: We are going to ask the different carriers to furnish certain specific information in regard to every contract.

[fol. 321] Mr. da Ponte: Every one of our contracts are already on file with the Commission, for its information, if I am not mistaken.

The Director: We want it in the form of an abstract of each contract, showing the name of the contract, the date of the contract, and the name of the company or individual, the rates named, the minimum load, and between what points applicable, and various other items, and we will mail to each one of you a letter stating the details we desire.

Mr. Dudley: We have but one contract in existence. It don't in-

volve any question of rates, and that I think the Commission has been furnished a copy of. And those rates have not been used since prior to the time of federal administration. We have no rates whatever except those specified in the tariffs on file with the Commission.

The Director: I would like to ask the carriers if it would be possible, without going to too much expense, to furnish the amount paid in 1919 and 1920 by the loggers for damage and repairs, first to cars equipped with bunks, and, second, cars not so equipped, if your classification of accounts is such that that information can be furnished.

Mr. Dudley: It would be impossible to furnish it in that shape for this reason, that on the Milwaukee road the only record kept of the car repairs is the number of the car. Now we would then have to check them over and look up every item of repairs in connection with the car movement and then ascertain whether or not that car was equipped with a bunk on it, which means going back to the original record. Now for the purpose of furnishing the information which we gave to the Commission in respect to cars we covered a period of six months and it cost us over $2,000.00 and it took us quite a long time to get that information; now to get this additional information it would simply cover the same territory and a great deal [fol. 322] more and I would say in answer to your suggestion that I would doubt if that information could be obtained inside of three months, or without putting on an exceptionally large force on that work because it meant going back to every record in the different shops, to every item of repairs and checking them all over to find out which were included in any car and then check them up again to find out which were equipped with bunks and not bunks. It is very expensive information to secure.

The Director: Well we will not require that at this time.

Mr. da Ponte: Do I understand you- question to mean that you want the amount that the shippers have paid for damages to log cars?

The Director: Yes.

Mr. da Ponte: And then the further information there in regard to patent bunks?

The Director: What we wanted was the amount paid during 1919 and 1920 by the loggers or shippers for damages and repairs to cars equipped with bunks and cars not so equipped, so as to segregate them.

Mr. da Ponte: Mr. Albee says we have no records as to bunks, but we can furnish you with what they paid.

Mr. Balmer: I think the Great Northern can too, it is so small an item it would not be hard to check them up.

Mr. Calderhead: Usually your repairs would be designated by car number and the car number would indicate whether it had a patent bunk or not.

Mr. Albee: I think we could probably tell whether the car was equipped with patent bunks but we have a lot of cars that are equipped with wooden bunks.

Mr. Caldhead: That are not designated?

Mr. Dudley: The information as to what amount was furnished [fol. 323] by the shippers, we can furnish, that is not difficult to get but the other information is impracticable.

The Director: Well we would like to have the carriers furnish that then, the amount paid during those two years by shippers for damages and repairs to logging cars segregated.

Mr. Balmer: During 1919 and 1920?

The Director: Yes.

Mr. da Ponte: Now on this other information, will you write us a letter so we will know?

The Director: In regard to contracts, yes.

Mr. da Ponte: Or anything else that occurs to you?

The Director: Yes.

Mr. Henderson: Did your inquiry also include information as to what the shippers had paid for the bunks? In other words I understand that many of the shippers have paid for these bunks themselves.

The Director: If that information is desired and the carriers can furnish it.

Mr. Balmer: Why should the carriers furnish information as to what the shippers have paid for the bunks? Why don't the shippers furnish that? As far as we are concerned we have one shipper who uses bunks and he stands at the rostrum now and has already testified what he paid.

Mr. Henderson: He tole me that he paid a lot of money for the bunks.

Mr. Frost: I would like to make this suggestion. In a suit that was brought in the federal court against what used to be the Puget Sound Foundry Co. for the infringement of a patent on the turtle back bunk the question of the comparative cost of repairs and maintenance to log cars was one of the principal issues in that case and a record was made of all of these matters that you have just asked for, the cost of maintaining and repairing the cars equipped with steel bunks as compared with the cost of maintaining cars not equipped [fol. 324] with bunks, and I think if such a record—that is the testimony that was taken and transcribed by the stenographer in that patent right case is admissible as evidence why it can be secured, and the witnesses who testified in that case were officials of the Northern Pacific and the Great Northern Railroad and were very familiar with all the circumstances and I think if that is of value to the record all that testimony can be obtained.

Mr. Dudley: I never heard of such a case.

Mr. Balmer: There is another manner in which the Commission can get the information on that subject and that is the exhibits that all the lines have put in evidence as to car repairs. Now the Great Northern has only one line that is equipped with patent bunks. Now the cost of car repairs on the Great Northern which has no patent bunk cars, as compared with the cost of repairs on some of these other lines which have patent bunks, ought to be some criterion as to the class of cars originating the most car repair bills.

Mr. Welsh: Well I think Mr. Henderson is right in asking for

the information, here is the situation: The Great Northern years ago and the Northern Pacific equipped certain cars with bunks—for instance they would come to me and I would enter into contract with them to equip 25 cars with bunks for which I agreed to pay so much per car and they charged me 50 cents per trip on that car until it was paid for and I didn't know whether I owned the bunk or they did. Now the Milwaukee has a different system and they charge it up to us at, say 5 cents per thousand for all cars they put bunks on and the rate has gone up until we are paying 8 cents, and now I think this Commission is entitled to know what amount the Chicago & Milwaukee is receiving for those bunks, as I certainly think in the final windup those charges will be eliminated. We [fol. 325] want to know if we pay for them once or many times.

The Director: Well if that information is considered desirable or necessary we will ask the railroads to furnish it.

Mr. Welsh: It certainly is as far as we are concerned.

Mr. Henderson: I have no other information to ask for but I would like to know when we are going to get copies of the Northern Pacific exhibits?

Mr. da Ponte: You will get them when they are put into the record. We offered the exhibits. I don't think we are under obligation to furnish copies of them.

Mr. Henderson: You know that you never got exhibits in like that before and all we asked was for time to look them over.

Mr. da Ponte: You objected to them until we brought a man from St. Paul.

Mr. Henderson: No, I told you I wanted a chance to look them over, and I advised you Tuesday, personally, that I would not object to them.

Mr. Carey: I want to ask Mr. Capron a couple of questions either this evening or in the morning.

Mr. Welsh: Mr. da Ponte an hour ago you told us you would furnish them to us.

Mr. da Ponte: I was just kidding you. I will give you the ex-exhibits.

Mr. Carey: This 100,000 cars of logs that you referred to *to* in the opening of your testimony Mr. Capron that was your log movement in 1920 west of the Cascades and it moved locally in the State of Washington?

[fol. 326] A. Yes sir.

Q. Mr. da Ponte asked you about the relation between log rates in Washington and log rates in Oregon, do you recall that part of your testimony?

A. I think the question as I remember it was, whether or not our rates would affect others.

Q. And you answered in the affirmative as I remember it.

A. I think that I said that it would be a natural assumption or my opinion, I think that is the tenor of my reply.

Q. Now that comes about by reason of the fact that the log rates

in each state is predicated upon the outward lumber movement from the respective districts?

A. As I said, it would be the argument brought by the shippers. He would say that he had to market his product in the same territory where the Washington man markets his and I don't suppose he would object to some slight difference in the rate. He undoubtedly would if it was too marked if he was in a position to make his objection any good.

Q. What I am driving at — this, that that is one of the elements that shows the intimate relations between the log rates and the lumber rates?

A. I don't know that I would put it quite that way.

Q. Well you say that the log rates in Washington to an extent influence the log rates in Oregon, that is what you said?

A. I said it would be my opinion that they would.

Q. Now if that influence is carried through the rate on manufactured lumber——

A. That would be the argument of the man who was shipping lumber, he would say, I don't want to pay any greater transportation on my logs than the other fellow.

Q. Then there is a relation between the rates on logs between the two states, just to the extent that the lumberman's argument is sound or unsound?

[fol. 327] A. Yes that would be equally true of rates on ore as compared with the product of smelter. Well, you could carry it through a good many lines, say rates on fertilizer and farm produce etc.

Q. Now one of the questions I had in mind to ask you but Mr. Henderson asked it and that is, if the greatest bulk of your products moved in Washington under your special commodity rates which are below the level of your distance tariffs?

A. A very large amount of our traffic moves on special commodity rates.

Q. Well the general level is below your distance tariff rates?

A. Yes.

Q. So that if all the traffic was put up to the level of your distance tariff, and the special commodity rates were abolished such a change would result in a very marked increase in revenue?

A. Yes, it would give us a very substantial increase.

Q. Now the best rate under your present distance tariff is $1.56½?

A. Yes sir.

Q. Now how much in addition to that base rate of $1.56½ do you believe, as a practical traffic man, you could impose on the log traffic and not seriously imperil it?

A. I could not answer that question at this time.

Supervisor Cleland: In that connection I have prepared a form which will be sent to all the carriers and to all interested parties in which the Commission requests that they furnish the information showing what rate *them* deem fair and reasonable and what steps the mileage should be in. Whether they should use the minimum feet or weight, whether they should be single or trainloads

or whether that should be optional, and other information along that line. We will require all of the carriers and all of the parties to fill out one of those blanks together with the evidence to justify [fol. 328] it.

A. (Continuing:) I was going to go a little further and say that testimony has been introduced here already that would tend to indicate what we thouht might be a reasonable rate to apply on that traffic, but before expressing any opinion as to what the rates should be under present conditions I think we should have the benefit of the testimony of these loggers, and cross-examination, because we have no way of getting any actual information except out of conversations with them and it may be that these conversations—they have their own views you know, which they might qualify a little on the witness stand.

Supervisor Cleland: Yes we concluded at the conclusion of the hearing that people are only human and if traffic men who have made this a life study cannot advise us as to what a reasonable rate is——

A. I think we can do that, as to what is a reasonable rate per se, but when the question comes up as to what we can afford to make or what might be necessary to move the traffic under existing conditions, why we ought to have some information from these men upon which to base it.

Mr. Henderson: Anticipating something of that kind we have been attempting to get the total of loaded cars from each one of the carriers for the year 1919 when there was just one rate, and the total loaded car miles and the total revenue and the total board feet. If we have the total number of cars we can compute the total board feet. Now we have sent to every shipper to get his opinion on that but we cannot get it from 1,000 different men and we have been attempting to get it from the carriers and so far with the exception of eleven months from the Northern Pacific we have not been able to pull that out.

Mr. Da Ponte: I deny that, we furnished what the Commission asked for, and I think our obligation has reasonably been discharged.

Mr. Henderson: I said you furnished it.

[fol. 329] Mr. Carey: Hasn't this investigation gone far enough now so that you could express this to your own satisfaction—that if the Commission abolishes all these special commodity rates and substituted distance tariffs, that it is utterly out of question putting in a base rate of $2.70 or anything like it?

A. I wouldn't want to make that statement absolutely until we got all the testimony in, having in mind the rates that are in effect down in the territory where your competition comes from, and statements that I have heard to the effect that the cost of stumpage out here is very much less than it is down there.

Q. You prefer then to reserve your opinion until you hear more of the testimony?

A. Yes.

Mr. Carey: That is all.

Mr. Welsh: Tell me a thing or two that I don't know in regard to weighing of these cars covered by your statement, did you weigh the empty back or did you take the tare weight stenciled on the car?

A. Just the tare weight.

Q. And what were they wooden or steel cars?

A. Both.

Mr. da Ponte: As I understand it—I talked with Mr. Calderhead—but before the next hearing we are to have some information——

Mr. Welsh: Will you let me finish first? Now you were speaking under direct examination you said you discovered it or knew it for some time past, that there was a big leak in the revenue due to the insufficiency of the log rates. You remember that?

A. Yes, we have felt that for some time.

Q. Now do you realize that your log tonnage in this state was 3.66% of your total tonnage?

A. Of our total tonnage?

Q. Yes.

A. No sir, I do not know.

[fol. 330] Q. That is in 1919?

A. No sir.

Q. Well that is true though. If that was the percentage your leak could not have been very detrimental to you, could it?

A. Why yes, that is a very large percentage at that for any particular traffic. However I think your figures are wrong on that.

The Director: At the next sitting or hearing we desire that all parties furnish at least three copies of every exhibit for the members of the Department and not less than twenty copies for all the other parties to the action, we will ask the railroad companies, if the parties are not already supplied with a sufficient number of any of the exhibits, to furnish an additional number of certain exhibits. We can perhaps do that by letter as to the exhibits already introduced.

Mr. da Ponte: I understand that we are to have before the next hearing, such exhibits as will be submitted by the other side for our consideration prior to that meeting, or otherwise, if furnished at the meeting we are to have an opportunity for consideration of those exhibits and to prepare counter exhibits or a rebuttal testimony, as the case may be. I would sooner have them before but if they have them when they come here we want a chance to look them over. Mr. Calderhead agreed to furnish his as soon as he got them ready. We would suggest that he make a study from the exhibits that he does have furnished him for his use and send us copies, with such explanations as may be necessary in order that we may understand their purpose.

Mr. Henderson: When we make the same kind of a study and get our exhibits in shape we are perfectly willing to submit copies also, but we have not yet enough information upon which we can yet make [fol. 331] up our exhibits but as soon as we get them and get them

in shape we will be glad to give them to the Commission for distribution to the interested parties or directly to interested parties.

Mr. da Ponte: The point is we will have an opportunity to look them over and we may have to get figures from St. Paul or bring witnesses out in connection with them in order to go ahead.

Mr. Henderson: I realize that fact and that is why this matter came up. The information requested by the Commission was the first time anybody ever saw the good point of it, and any time the carriers furnish the information asked for we will look it over and be prepared.

The Director: Very well we will ask the carriers, those you have not yet furnished the information called for, to do so as soon as possible.

Mr. da Ponte: I think that is all in except the O. W. R. & N.

The Director: Well we called for information regarding the contracts and other matters. It will be impossible for us at this time to set a day for further hearing owing to the condition of our calendar but ample notice will be given to all parties who appeared here of the subsequent hearings in this case which will be as soon as can be possibly arranged for under all the circumstances. The hearing is adjourned.

[fol. 331a] In Supreme Court of Washington

[Title omitted]

Clerk's Certificate

I, C. S. Reinhart, Clerk of the Supreme Court of the State of Washington, hereby certify that the above and foregoing, together with the six volumes accompanying the same comprising in all seven volumes, of which the within is vol. 4 pages 332 to 581 are a full, true and correct transcript of the record in the above-entitled cause, and that in pursuance of the writ of error heretofore received I now transmit the same together with the original writ of error and the original citation which is contained in Vol. 1 hereof.

In testmony whereof, I have hereunto set my hand and affixed the Seal of said Court, this 16th day of April, 1924.

C. S. Reinhart, Clerk of the Supreme Court of the State of Washington. (Seal of the Supreme Court, State of Washington.)

[fol. 332] Olympia, Washington, June 27, 1921—
10 o'clock a. m.

Hearing continued from the 13th day of April, 1921, before Director E. V. Kuykendall and Supervisors Hance H. Cleland and Frank H. Spinning.

All parties were present or represented, as before.

The Director: Do the Carriers desire to present any further testimony?

Mr. da Ponte: Yes. I want to offer two additional exhibits by Mr. Capron, with the understanding that the cross-examination be confined to these two exhibits, as we have another witness that I want to go right along with, and I don't want to take the time for an extended cross-examination on other matters at this time. I will call Mr. Capron.

L. R. Capron (recalled).

Direct examination.

Mr. da Ponte:

Q. Have you prepared an exhibit comparing log rates in Washington, effective June 24, 1918, with those lignite rates held confiscatory in the North Dakota cases?

A. Yes.

Q. Please produce that and let it be marked Northern Pacific's No. 8.

The Director: Any objection to the admission of this statement?

Mr. Henderson: Yes, we object to the introduction of this exhibit as incompetent, irrelevant and immaterial, comparing coal rates with log rates.

[fol. 333] The Director: The objection is overruled and the exhibit will be marked Northern Pacific's No. 8.

(So marked.)

Mr. da Ponte:

Q. Please make any comment on that you may desire?

A. This exhibit is a comparison of the rates on sawlogs in the State of Washington with the rates on lignite coal, that were condemned by the Supreme Court as being confiscatory for the transportation of lignite coal in North Dakota. The log rates used are those that were in effect in Washington at the time that the lignite rates shown were in effect in North Dakota. In other words the rates are all rates prior to June 25, 1918. Since that time they have been subjected to the general advances.

Q. All of those rates?

A. Yes.

Q. Now this exhibit shows that the log rates are materially lower than the lignite rates?

A. It shows not only that the distance rates on logs that the Northern Pacific carry are substantially lower but it also shows that the average rates received for these different distances is very materially lower. In fact the spread is so great that in my opinion it is pretty conclusive evidence that these log rates would not stand a similar test. In other words, that they are or could be proven to be confiscatory. The spread between the two is so great that you could

make allowances for almost any criticism in the way of different conditions and still be able to make that point.

Q. Is that all in regard to that exhibit?

A. Yes.

Q. I want to call your attention to this exhibit showing the comparison of ton mile earnings on various commodities with rates [fol. 334] on logs, and we offer that as Northern Pacific's No. 9. Please explain that exhibit Mr. Capron?

A. This exhibit is a comparison of the per ton per mile earnings on various commodities that move in some volume; you might say the various low grade commodities, ones that are probably more properly comparable with logs than any other commodities that we would be able to pick. The figures are shown in mills and they indicate that as compared with all other low grade commodities the rates on logs are not only the lowest but very substantially below the rates on these other low grade commodities. The exhibit shows pretty clearly that logs are not bearing their proper proportion, or are not yielding their proper proportion of the revenues as a whole. I want to call particular attention to the lowest scale of rates shown in this exhibit aside from the logs. That is in the last column. The rates on ore from various stations in Montana to the East Helena Smelter. These are the lowest smelter ore rates that we have, and they were made largely in the same manner that our log rates were originally made, with a view to securing the outbound tonnage from the smelter, rather than to make a profit on hauling the ore in.

Q. That ore—$5.00 to $15.00 per ton, is that stated in the tariff?

A. Yes, that is the lowest grade of ore. Those rates have always been notoriously low and yet they are substantially higher than these log rates. The other comparisons speak for themselves; they simply show much higher rates on all other low grade commodities.

Q. That ore at $5.00 to $15.00 per ton would be comparable with the value of logs, wouldn't it?

A. I think so, although I am not thoroughly posted on log values. [fol. 335] Q. There is 8,800 lbs. to the 1,000 feet?

A. 8,325.

Q. At 8,325 lbs. to the 1,000 feet logs would be practically worth more than that ore wouldn't it?

A. I am not posted on the value of logs. There is quite a variation, as I understand the matter, in the log values; for instance spruce logs and some other classes.

Mr. da Ponte: Well, there will be an exhibit showing what the value of logs are before we get through. Now those are the lowest rates per ton per mile with which you have made comparisons, on commodities that move in any volume?

A. My exhibit shows that Mr. da Ponte.

Q. I say, you picked out the commodities which now carry the lowest rates of any commodities in the tariff?

A. Yes sir.

Q. And logs are far under any other commodity per ton per mile?

A. Yes.

Q. Is there anything else in this connection?
A. No sir.

Cross-examination.

Mr. Henderson:

Q. Referring to the last Northern Pacific Exhibit, No. 9, from that exhibit the presumption would naturally follow that generally speaking the traffic per ton mile on other traffic than logs would be more profitable than it would be on logs would it?
A. I would say that taking that into consideration in connection with the other exhibits that have been presented in this case it would indicate that the loss on the transportation of logs is relatively greater [fol. 336] than the loss that we are now sustaining on the handling of our entire traffic.
Q. That the loss on logs, generally speaking, is greater relatively than the loss sustained on the rest of the traffic?
A. Yes sir.

Redirect examination.

Mr. Balmer:

Q. In that connection that conclusion would always be influenced by the similarity of the haul involved would it not; the length of the haul involved?
A. You say that conclusion would be influenced—I don't think I quite understand you Mr. Balmer.
Mr. Balmer: What I mean to say is, that in reaching the conclusion you have mentioned——
A. Well, there is no conclusion to it. This is just a plain statement of the facts as to the rates for movement from 5 to 150 miles.

The Director: Any objection to this exhibit?
Mr. Henderson: No objection.
The Director: It will be admitted.

(Marked No. 9.)

Mr. da Ponte: You mean that there is no possibility of any other conclusion than that the loss on the logs is greater than on the other commodities?

A. No sir.
Q. That is an absolute fact, as shown by the exhibit?
A. Yes sir.

Recross-examination.

Mr. Carey:

Q. Referring to your Exhibit No. 8, you have reduced these log [fol. 337] rates to statements of tons per 2,000 lbs. on a net ton basis?

A. Yes.

Q. Your rates in the statement are largely based upon so much per thousand feet?

A. The rates on logs?

Q. Yes?

A. Yes.

Q. Now in changing these rates from the basis of 1,000 feet to the net ton of 2,000 lbs. you figured what weight per 1,000 feet?

A. That is shown; that is the first note underneath.

Q. I beg your pardon, I see it.

A. (Continuing:) I might say in that connection with lignite coal we get paid for every pound hauled, whereas this 8,325 doesn't necessarily represent all that we haul.

Q. On the contrary, in the case of lignite coal you don't get paid for anything that you don't haul, whereas in the case of logs——

A. If the lignite is not loaded to the minimum weight of course we get paid on the minimum weight.

Q. Yes but that would be a very unusual situation where a carload of coal would not be loaded to the minimum?

A. I think you are right about that.

Q. On the other hand it is a usual situation where logs are not loaded and cannot be loaded up to the 7,000 minimum?

A. That is because of the method of scaling and these allowances that are made.

Q. But that is a fact; no matter what may be the cause of it that is a fact, that it is very frequently the case that the logs are not loaded to the minimum?

A. That is a fact, for the reasons I have stated.

[fol. 338] Q. That results too, quite frequently, that it is not possible to get the minimum amount on the car. For instance the common minimum is 7,000 feet, but in a great number of movements it is impossible to get that minimum on the car?

A. I don't know.

Q. Now referring again to Exhibit 8, these rates you say are not the rates now in effect but the rates that were in effect prior to June 1917 or 1918?

A. Yes.

Q. Which was it, 1917 or 1918?

A. 1918.

Q. Now when these lignite rates were increased, following this decision, what rates did you put in; how much of an advance over the rates shown on this exhibit?

A. I couldn't answer that question because there was a new scale worked out; there was no percentage of increase; that is, it differed with different distances. However that scale was put in on order of the State Commission of North Dakota, who were a little peeved because they had been reversed by the Supreme Court, and the chairman of the North Dakota State Commission announced in the hearing in my presence, that it was their intention to put in a scale of rates that would just give us sufficient additional revenue so that we would not be able to prove another case of confiscation.

Mr. Carey: In other words the Commission announced its purpose and you acquiesced in it by putting in a scale of rates which would barely pay for operation——

A. We didn't acquiesce, we were powerless to do anything, because the only way we could overthrow their order would be to go through another long and tedious procedure; and as I say, they put in rates which they figured would just give us enough so that we would not be able to prove another case of confiscation.

[fol. 339] Q. You are not able to state to the Commission how the new scale of rates compare with this scale that had been condemned?

A. No, that would be impossible, because you have to take the rates for each distance.

Q. That could be done?

A. It could be done, but it is impossible for me to state off hand so that I can furnish the information.

Q. I see. Now this lignite coal, what is the value of that on the car at the mine, per ton?

A. The value at the time this case was tried, as I remember it, ran anywhere from $1.25 to $1.50; that is, for the steam coal. But during the war it got up as high as $2.25 I think. But at the time this case was tried it was around $1.25 to $1.50.

Q. Now while you have given these rates on coal from 5 miles to 150 miles, I presume the fact is that very little of this coal moved these short distances?

A. The great bulk of that coal tonnage moved for short distances. I mean distances under 50 miles. The heaviest single movement in the state is for a distance of about 27 miles.

Q. Now on your Exhibit 9 you have compared log rates in this state with other rates in the state on other low grade commodities?

A. Yes.

Q. Now I don't understand this Exhibit, how did you reduce these log rates to——

A. Just a minute, the ore rates that I speak of don't apply within the State of Washington.

Q. Naturally not, but aside from the ore rates all the rates you have shown on Exhibit 9 are Washington state rates?

A. Yes.

Q. Now these log rates that you show in Exhibit 9, have you reduced those to net tons?

[fol. 340] A. Yes, that is also explained, right at the bottom of the page.

Q. I notice here on Exhibit 8 you have rates on sawlogs for 5 miles to 24, and in Exhibit 9 you have it from 5 to 76——

A. Oh, one is the rate per ton and the other is the rate in mills per ton per mile.

Q. I see. For instance take your first figure in Exhibit 8, 5 miles to 24, what is that 24?

A. That is 24 cents a ton. Another thing you want to remember

is, that those are the old rates, while the exhibit comparing the per ton per mile earnings represents the present earnings, as stated up at the top of the page.

Q. But of course the new rates are not 300% of the old rates?

A. The one is mills per ton per mile and the other is the straight rate per ton in cents. It is explained at the top of each exhibit. One is the rate per ton of 2,000 lbs. I notice we didn't say there in "cents," but that is the comparison with the log rates—is a statement in cents per ton of 2,000 lbs.

Q. Well, then, what does this 76 mean in the other rate?

A. That means that our rate per ton per mile for a 5 mile haul on logs is 76 mills.

Q. Yes, I see; that is stated up at the top here?

A. Yes.

Q. Now the first commodity you have on Exhibit 9 is common brick; what is the value of that per ton on the car?

A. I don't know.

Q. The next commodity is cement, what would be the value of that per ton on the car at the point of shipment?

A. I can't answer that.

[fol. 341] Q. You know it would be a great many times the value of a ton of logs?

A. No, I don't.

Q. You know it would be materially more, don't you?

A. I should imagine so.

Q. Yes; the prevailing price of cement for a long time here was $3.00 per barrel as I recall it. Do you know how many barrels of cement there are to the ton?

A. Oh, about 5.

Q. Your next column or next commodity is crushed limestone fertilizer, what would be the value of that per ton on the car at the point of shipment?

A. I don't know, except that it is very low; at least that is what they tell us, because they asked for very low rates on it on the ground that nothing but very low rates will move it.

Q. And the next commodity is grain. The value per ton on the car of that for instance would be very much higher relatively?

A. Yes, and the grain rates are very low relatively too. I mean speaking in relation to the value of the commodity.

Q. The next commodity is lumber, I presume that means manufactured lumber?

A. Well I don't know just what you mean by that?

Q. I mean sawed timber, lumber manufactured——

A. Yes it has to be sawed before it is lumber.

Q. And the value of that on the cars is materially more than logs?

A. Yes. Of course there is some lumber that the value on the car would not exceed the value of some logs.

Q. Certainly but the average of the lumber which would move

under that rate would be materially higher than the logs which move under the log rates?

[fol. 342] A. Yes, and the rates are materially higher too. I might say that those lumber rates are a very low basis of rates themselves. You will note that we have put an "X" in front of the lumber, and explain below that these distance rates are the lowest applicable to these commodities in force in Western territory.

Q. Now the next commodity is sand and gravel, do you know how the values on sand and gravel, on the car, per ton, compare with logs?

A. Well I couldn't say offhand jut how that would work out per ton, but the 50 cents per yard is a very fair value for this washed sand F. O. B. cars.

Q. The next commodity is coal from Wilkeson, Washington, to main line stations in Washington. Now the value of coal per ton on the car is materially higher than logs isn't it?

A. Well, it is too high, I know that, I have had to buy a lot, but just how it compares with logs I don't know.

Q. The next commodity on Exhibit 9 is junk, the value of that commodity would be materially higher than logs per ton?

A. It is higher, I believe.

Q. The next rate, which is the last one on Exhibit 9, is the Montana ore rate. Apparently the rate there is based on the value of the ore? The values of $5.00 to $15.00? $5.00 to $15.00 per ton?

A. Yes. Now there is one thing that I want to explain about that, and that is, that basing the rate on the value is not because of the transportation risk or anything of that kind in handling the freight; simply as I claimed a while ago, they claim that ore of such a low value could not stand the higher transportation charge.

[fol. 343] Q. In other words, ore valued at $20.00 per ton can afford to pay more than ore valued at not over $500 per ton?

A. Yes, that is true.

Q. Do you charge the same rate on all ore from $5.00 to $15.00 per ton without regard to what the value is, within these limits?

A. Yes. You see these ore rates that we have shown here are published specifically into the smelter; it is not a distance schedule.

Q. Yes, you publish a specific rate over the lines to the smelter.

A. From a particular smelter, and of course the valuation shown is different in some of the cases, according to the value of the particular ore, but the values that apply in connection with these rates run from $5.00 to $15.00.

Q. I see, in making up your rate from a particular mine you take into consideration the value of the run of the ore from that particular mine and publish your rate accordingly?

A. Yes.

Mr. Henderson: Can you state whether or not the lignite rates put in by the Director General in 1918 were lower than those referred to in your Exhibit 8?

A. They were not; they were very low though. The Director General put those rates in during the period of fuel shortage, and

under the plea that the eastern mines were burdened and could not turn out enough coal, and that if a low schedule was put in on lignite coal some of it would be used and thus relieve the pressure on the regular coal mines.

Mr. Henderson: Have those rates been changed except by the general release?

A. Not yet.

[fol. 344] Mr. Welsh: Why did you predicate these two exhibits on the 1918 tariff instead of on the 1920?

A. We didn't predicate the two exhibits on the 1918 tariff.

Q. The No. 8?

A. There is just the one exhibit. We did that because we wanted to make a comparison with the exact rate that was found confiscatory.

Q. That is your only reason for doing it?

A. Yes.

Mr. Welesh: If it is agreeable to the Commission I will reserve the right to cross-examine this witness further after other exhibits have been introduced, which will be a considerable saving of time.

The Director: Very well.

Mr. da Ponte: At this place in the record the carriers desire to request the loggers to furnish the following information: We want the log scale on the logs which were moved and on which freight was paid, and the lumber run on the same logs, for some reasonable period, say five or six months of 1920. We don't need that from all of the mills but from a representative mill on each of the divisions on each of the lines.

Mr. Welsh: So that I don't misunderstand you let me as you, you want a representative mill or mills to furnish you with the entire log scale into their plant for a period of six months, say, and also the entire scale of the lumber output of that mill for the same period?

Mr. da Ponte: From those logs?

Mr. Welesh: Yes, from those identical logs; is that what you want?

Mr. da Ponte: Yes.

[fol. 345] Mr. Welsh: All right.

Mr. Henderson: As representing the loggers we have no way of telling what the mills cut out of those logs. We don't represent any loggers here.

Mr. da Ponte: Yes you do, you represent loggers doing their own milling.

Mr. Henderson: I don't now who they are, maybe you do. The Sultan Logging Company and the Westport Logging Company, those fellows certainly don't have any mills that they are cutting lumber at. Furthermore I think this request comes pretty late at this hearing. It would take us some little time to go out and get a set of statistics.

The Director: I think likely some of the millmen present could give a very good idea of the ratio of the lumber feet to the log feet.

Mr. Henderson: So far as anybody here is able to testify to it we would be glad to furnish the testimony, but to be required to go out

and get it, I think it would take us some little time to get the information.

The Director: I think it can be obtained from the witnesses present.

Mr. Henderson: We will be very glad to give that.

Mr. da Ponte: Well, that is what we are asking for. Let's see whether it is furnished or not.

Mr. Henderson: I would say that our clients are glad to furnish any information we may have here at this time, but the only objection I have is to the Commission making an order here at this time requiring us to do so.

Mr. da Ponte: We are not asking the Commission to make any order.

Mr. da Ponte: I will call Mr. Peterson.

[fol. 346] E. V. Peterson, a witness produced on behalf of the respondents, after being first duly sworn, testified as follows:

Direct examination.

Mr. da Ponte:

Q. What is your name?

A. E. V. Peterson.

Q. What is your occupation?

A. Assistant Statistician for the Northern Pacific Railroad Company.

Q. What are your duties?

A. My duties are in connection with compiling farious data for use in connection with various rate cases, and work along a general fiscal nature.

Q. For the purpose of showing the cost and revenue from railway operations and things of that kind?

A. Yes, for the last 10 years or more, yes.

Q. I call your attention to Exhibit marked Special 150, and ask you state what it is? There are half a dozen in that one exhibit and they are all bunched together and classified so that we won't have to stop and introduce them separately. State what that exhibit is?

A. The first statement we are putting out is statement 150——

Mr. da Ponte: We will mark this Exhibit 15——

The Director: Well, have you these other exhibits——

Mr. da Ponte: Well, if we don't have them it won't make any difference.

[fol. 347] The Director: It might leave the impression there were some missing——

Mr. da Ponte: No, it will show in the record that we are marking this No. 15, so as to leave room for other traffic exhibits. There were 9 traffic Exhibits up to date.

(So marked Exhibit No. 15.)

Mr. da Ponte: Proceed and explain that exhibit.

A. No. 150 was prepared at the request of the State Commission to show certain information regarding freight operation as affecting the log traffic, and the amounts that are shown on there are the freight operating expenses for the Seattle and Tacoma Division and the Puget Sound Division, and it might be well to state at this time the method of the compilation charged to the freight traffic——

Q. No, don't state that yet. Are those simply selected accounts?

A. They are the accounts that were requested by the Commission in detail.

Q. And they do not purport to be a complete statement of operating expenses?

A. No.

Q. But only what Mr. Calderhead requested?

A. Yes.

Q. There is no special comment, I take it, on that Exhibit.

A. No.

The Director: Any objection to the admission of this Exhibit?

(No response. Marked N. P. No. 15.)

Mr. da Ponte: I call your attention to Exhibit marked Special 150-A, which will be N. P.'s Exhibit No. 16, and ask you to state what that is?

A. Exhibit No. 16 covers the statement of freight train miles of [fol. 348] traffic moving over the Seattle, Tacoma and Puget Sound Divisions for the three months of September, October and November 1920, and the corresponding period of 1919.

Q. Now this shows the Seattle and Tacoma divisions, and you mentioned the Puget Sound Division, I will ask you to explain what the Puget Sound Division is, and why it is not shown separately?

A. We have never made it a practice to compute any mileage for the Puget Sound Division but have assigned all mileage to the Seattle and Tacoma Divisions, according to the run of the train.

Q. The Puget Sound Division is generally known as the line between Tacoma, Washington, and South Tacoma, Washington, and Kieth.

A. Yes.

Q. And Kieth is north of Woodinville?

A. South of Woodinville, Washington.

Q. And these figures in 1916 include the operations on that division assigned for the Seattle and Tacoma divisions?

A. Yes, they include all operations of the Northern Pacific west of Ellensburg, Washington, but leaving out the line in Oregon, which was not taken in.

Q. All Washington lines west of Ellensburg?

A. Leaving out the State of Oregon, yes.

Q. Now what is the purpose of those figures in this Exhibit, what bearing will they have?

A. They are shown to substantiate the figures shown on the next Exhibit.

Q. They are figures taken from the accounts of the Railway Company which you used in comparing Special 150-B, which we now [fol. 349] offer as Exhibit No. 17.

(Marked No. 17, N. P.)

Q. Now these are the exhibits which have been furnished at the request of Mr. Calderhead, are they not, and they have been in the possession of the Department since the last hearing. I will state that to be the fact. The witness doesn't know that personally, but those are the facts. Now what is the Exhibit marked Special No. 150-B, or Northern Pacific's No. 17?

A. Northern Pacific's No. 17 purports to show the cost of operation of freight traffic on the Seattle, Tacoma and Puget Sound Divisions, main lines and branch lines, so as to give an indication of the cost of handling the log traffic.

Q. Now by what system of accounting was this exhibit prepared?

A. It is prepared on what is known as the Northern Pacific basis, as far as division of expenses are concerned, which are common to both freight and passenger service.

Q. That is slightly different from the I. C. C. classification?

A. In that respect yes.

Q. Now then it shows for this same three months, September, October and November, I believe?

A. The same three months, yes.

Q. Why was that period of three months used?

A. The evident intention was to get three months that would reflect the increased rates.

Q. And that was asked for by Mr. Calderhead?

A. I won't say as to that.

Q. Is that true Mr. Calderhead?

Mr. Calderhead: Yes.

[fol. 350] Mr. da Ponte: Now, then, the first item is "Total Station Service" freight amount $309,874.00, explain what is meant by that?

A. Well, station service is made up of four or five different accounts. For instance there is station employes and station supplies, weighing cars and operating joint yards and terminals. There are two accounts in that item, a debit and a credit. The $309,874.00 is made up of the amount assigned directly to the freight service for those accounts, and also includes a proportion of the charges common to both freight and passenger traffic.

Q. Distributed according to the Northern Pacific accounting system?

A. Yes sir.

Q. Now, as I understand you then, that item of $309,874.00 represents the actual operation, actual cost of total station service for the Seattle and Tacoma main line, including the Puget Sound Division, for the three months of 1920?

A. It does, yes.

Q. Now in one column, "including the Puget Sound Terminals," and in the next column at the top it is excluded—Puget Sound

Terminals, now explain what is meant by including and excluding those terminals, and what those terminals are?

A. The entire expense of the line between South Tacoma and Kieth would be shown as the Puget Sound Division.

Q. That is the same as the Puget Sound Terminals?

A. Yes, so I have understood.

Q. Now that applies only to the main line because no part of that terminal is on a branch line?

A. No, that is not so considered, it is all main line.

[fol. 351] Q. Now what is assigned to freight operation of the expense of those Puget Sound Terminals?

A. The amount that is directly assigned to freight is naturally such amounts as are so classified, such as strictly freight items, and in addition to that of course we have the proportion of the common charge, as I indicated before, charged to freight service.

Q. Then is there anything charged in this account for operation of the King Street Passenger Station, or the Tacoma station?

A. There would be nothing on account of the King Street passenger station, but there is a possibility that there is a small charge against the Tacoma Union station that was for the benefit of both freight and passenger; it might be so allocated.

Q. In other words, then, these terminal facilities that are provided for passenger use are not charged into the freight operating account?

A. No sir.

Q. Now, then, you have a column headed "Per estimated loaded car miles, in cents", so that the total station service of $309, 874.00 is equivalent to 5.24 cents per estimated loaded car mile?

A. Yes.

Q. Now what is meant by the term "Loaded Car Mile"?

A. It has always been considered the standard practice with the Northern Pacific to assume that the handling of an empty car is equivalent to handling one-half of a loaded car. Therefore we take the loaded car miles of freight and add to that one-half of the empty car miles, thereby obtaining what we call the estimated loaded car miles.

[fol. 352] Q. Well, towards the bottom of the statement you show loaded car miles freight 5,041,526. Do you mean by that that that is the actual number of loaded car miles made during those three months, the actual movement on the main line, of those two divisions?

A. Yes sir.

Q. Now that is actual figures is it?

A. Yes.

Q. Taken from the accounts?

A. Yes.

Q. Then the empty car miles you state is 1,748,362, where was that figure obtained?

A. On the same plan as the loaded car miles, actual movement of empty cars.

Q. Now are records actually kept on each division of this actual movement?

A. They are, and are reported monthly, and compiled in the St Paul general office.

Q. Then you have the estimated loaded car miles of freight?

A. Yes——

Q. Of 5,915,707, which figure, as I take it, is produced by taking one-half of your empty car miles and adding it to your total loaded car miles?

A. Yes sir.

Q. Now is that practice uniform and customary in all railroad accounting, to estimate the expense of the empty movement by adding to the loaded movement one-half of the number of empties?

A. It has been practice to my knowledge of the Great Northern and the Northern Pacific. I don't know that it is used as a uniform practice thoughout the country.

[fol. 353] Q. What about the Interstate Commerce Commission?

A. They make no provision for figures of that kind in their accounting.

Q. But do they include the cost of empty movement?

A. Well, in the matter of our reports to the Interstate Commerce Commission we have always shown the information separately, the loaded and empty car miles, and have never shown any estimated car miles.

Q. But that is a necessary provision in order to distribute the total cost of your freight operations to the empty movement?

A. It is necessary because if you don't do that it will result in an improper showing where the empty movement is in excess on one part of the line to the other part of the line.

Q. Well, that is the way they take care of the car mile basis and the empty movement which is taken care of on the 1,000 gross ton mile basis, by deducting the actual weight. That produces a figure, in other words, equivalent to your gross ton mile basis?

A. Yes.

Supervisor Spinning: Your reference extends only to the logging traffic?

Mr. da Ponte: No, this is total.

Supervisor Spinning: Of all commodities?

Mr. da Ponte: Yes, of all commodities. We are showing now the cost on these two divisions of all commodities, so as to show how we arrive at the cost to be assigned to the log traffic. It is perfectly simple, I think, this exhibit.

Mr. da Ponte:

Q. Now taking the next item "Total Yard Service" $445,884.00, or per estimated loaded car miles 7.54 cents, now that was taken [fol. 354] in the same way as your total station item——

A. In the same manner, yes sir.

Q. Now your "Train Enginemen" is the next item, how was that obtained?

A. All the items shown in engine service including train engine-

men are based on the inclusion of the entire amount charged to freight service and the car mile proportion of the mixed service.

Q. In other words your train enginemen's wages are first assigned directly to the freight service, that are incurred in the freight service?

A. Yes.

Q. And where there is mixed service, by which you mean mixed trains?

A. Well, assigned on the basis of the car miles on the mixed trains.

Q. Yes, if there was say 1,000 miles of freight and passenger you would divide that equally——

A. Well, that is a way of stating it, although the mixed is about 80% of the total.

Q. Now as a matter of fact there is nothing on the exhibit—what is that per cent, 80%?

A. It will run to about 80% of the freight traffic, ordinarily.

Q. That is where you handle mixed trains?

A. Yes.

Mr. Calderhead: How do you account for the caboose in your car miles, loaded and empty?

A. We take no account of the caboose in our figures at all

[fol. 355] Mr. Calderhead: In making your division you take into consideration the caboose?

A. No.

Q. You do provide for caboose mileage in your annual account to the Interstate Commerce Commission?

A. We do, yes.

Mr. da Ponte: Now that 80% figure has been ascertained by actual experience has it?

A. Yes sir, by actual experience, and it is a figure that varies very slightly, from month to month, but will generally be about 80%.

Q. The 80% of the mixed business is freight, you say?

A. Yes.

Q. Now this "Train enginemen" "Fuel for Train Locomotives" "Water for Train Locomotives, etc." is the freight proportion of all those expenses directly assigned, where you could assign them directly, and where their accounting is distributed on the basis of train miles?

A. Car miles in mixed trains.

Q. And that is the only allocation is it, they are all directly chargeable to freight except in mixed train service?

A. Yes and it also meets with the same requirements for the Interstate Commerce Commission.

Q. Those are the Interstate Commerce Commission's requirements also?

A. Yes.

Q. Now, then, your "Total Engine Service" is stated as $249,695, and per estimated car miles, in cents, 4.22, and that figure is taken

in the same way as you have explained with regard to the first [fol. 356] item?

A. Yes sir.

Q. Dividing the expense by the total number of car miles?

A. Total number of estimated car miles, yes.

Q. Now, then, your next item is "trainmen and train supplies and expense" what does that mean?

A. You mean the item included in the account or the matter of the division?

Q. Yes, what are included in the division?

A. Well, trainmen would naturally include the conductors and brakemen, and also in the event of passenger service would include all baggagemen, but they, of course, would not be included in the present figures, these being passenger charges entirely. The total train service is on the same basis as the engine service, as far as division of freight is concerned.

Q. You mean the common item of 80% mixed service is divided on the same basis?

A. Yes sir.

Q. Otherwise they are the expenses directly incurred in the freight service?

A. Yes.

Q. Now what is that item of "Total Casualties" $46,097.00?

A. It represents some of the following accounts, clearing wrecks, loss and damage to freight, damage to property, damage to stock, and injuries to persons. That is, the freight proportion, of course.

Q. Now how is the freight proportion ascertained?

A. In practically all cases of casualties the assignment is direct, but where it is not direct the apportionment has been made up—for instance the casualties occasioned by a mixed train we divide [fol. 357] it on the basis of 80%.

Q. Those items are all directly allocated to the freight service?

A. Practically speaking.

Q. And there is no division between passenger and freight except mixed trains?

A. That would be the only division.

Q. As a matter of fact are there any mixed trains on this division?

A. Between Seattle and Tacoma?

Q. Yes?

A. Well, yes, they have mixed train service.

Q. I didn't know. Then the next item is headed "Dispatching Trains" and there are five or six items there in that batch totalling $23,734.00. Now how are those expenses divided and what are they?

A. The item shown as "Other Accounts" includes operating joint traffic facilities, debit and credit. Any amounts directly assignable to freight of those accounts are so assigned, but in the case of other accounts shown under miscellaneous, the charges are practically all common, and the division to the freight service has been made on the basis of train mileage.

Q. Now is that the uniform way?

A. That is the Northern Pacific plan but is not the plan used in reporting it to the Interstate Commerce Commission.

Q. As a matter of fact this Northern Pacific plan is more favorable in its showing in its freight operation than the Interstate Commerce Commission's isn't it?

A. Yes, a greater amount is allocated by the Interstate Commerce Commission to the passenger business.

[fol. 358] Q. A greater amount is allocated by the Interstate Commerce Commission——

A. Yes. I would say that under the present plan the amount assigned to freight is higher than the Northern Pacific plan.

Q. But this sheet, using the Northern Pacific plan, makes a better showing for the freight service, that is, more favorable in the ratio of expenses to earnings——

A. Well, with the expenses chargeable to freight service under the Interstate Commerce Commission's basis of reporting it would naturally follow that the cost would be higher on that basis.

Q. What I am trying to get at is, that it makes a more favorable showing towards the complainant, using the Interstate Commerce Commission plan than the Northern Pacific——

Mr. Carey: The witness has stated how he drew it up, and I think the witness can draw his conclusions as well as Mr. da Ponte.

Mr. da Ponte: We will have another exhibit, that is the reason I am asking this question.

A. Well, I would say that the exhibit here for these three months, if prepared on the basis of the Interstate Commerce Commission's plan, would show a larger cost to the freight service.

Q. That is what I was getting at.

A. Yes sir.

Q. Now your total transportation expense is figured at $1,188,-472.00, and the cost per estimated loaded car mile is 20.09 cents. Now that, as I take it, is the sum of those transportation expenses you have already explained?

A. Yes sir.

[fol. 359] Q. And that was the transportation expense of making the 5, 915.707 estimated loaded car miles, that is the expense of those items?

A. We must bear in mind the qualifying statement offered, and that is this, that the car miles of the Puget Sound Division have, of course, been assigned to the Seattle-Tacoma main line, according to the run, and the expense shown over here excluding the Puget Sound Division you will notice shows the same car miles as the one including the Puget Sound, for the reason——

Q. That is what I mean, the expense of making that much mileage on the two divisions, including the Puget Sound terminals?

A. Yes.

Q. Have you followed that by a group of items headed "Repairs of Steam Locomotives," "Repairs of Freight Cars," "Shop Machinery," "Superintendence," etc., a total of $364,582.00. What are those items? That is the maintenance of equipment item is it?

A. Yes.

Q. What does that mean?

A. It means the expense incurred in keeping up the equipment of the road in working order, and expenses along the same line.

Q. Now some of those items are directly allocated to the freight service are they not?

A. Yes.

Q. Such as the locomotives and freight cars and the injuries to persons, is that true?

A. Yes sir.

Q. And those are the expenses actually incurred in the freight service?

A. Yes.

[fol. 360] Q. Now what items are common to both freight and passenger?

A. Well we have repairs to steam locomotives; we assign all repairs of locomotives to the freight and passenger service on the customary car mile basis. Repairs to freight cars of course is assigned to freight. Shop machinery is assigned to freight on the basis of train mileage. Superintendence is apportioned on the basis of locomotive mileage; that is, the common charge is apportioned to freight on that basis.

Q. That is, in proportion to the number of miles the freight service bears to the number of miles of passenger service?

A. Yes.

Q. That is, the number of miles made by the freight service as compared with the passenger service?

A. Yes sir. Injuries to persons is divided on the basis of train miles on the same plan, and the depreciation account is divided on various bases. Freight cars of course is all assigned to the freight service, and the locomotives is apportioned to freight on the basis of locomotive mileage assigned to the freight service.

Q. Now "Total Maintenance of Way and Structures" what is that, that is $449,230.00?

A. That includes all accounts as reported to the Interstate Commerce Commission covering maintenance of way; that is the freight proportion. It covers all accounts, taking care of the road bed and the maintenance of track and station buildings, etc.

Q. And how is that allocated between freight and passenger?

A. That is, practically speaking all the charges we have are common in their nature and they are apportioned to freight on the basis of locomotive mileage.

Q. The number of miles made over these tracks by locomotives [fol. 361] in the freight service as compared with the locomotives in the passenger service?

A. Yes sir.

Q. Now manifestly the same trains in freight and passenger service use the same tracks and station facilities and so you cannot directly allocate them?

A. No sir.

Q. So you must adopt a method or basis upon which they may be equitably divided?

A. Yes sir.

Q. Now what is the san-tion for using that method of locomotive mileage?

A. The present plan in reporting to the Interstate Commerce Commission calls for a separation based on the fuel for train locomotives, freight and passenger apportioned, but this basis of the Northern Pacific has been used for a number of years and is not specially sanctioned by the Interstate Commerce Commission, but has been used by the Great Northern and the Northern Pacific, and the Burlington, I think, for a number of years.

Q. The interstate Commerce Commission apportions it upon the basis of number of tons of fuel used by freight and passenger engines?

A. No, but on the actual value of the coal used by locomotives in the train service—in the freight service.

Q. Because the coal used for freight service is of less value per ton than that used for passenger service, or is it the other way?

A. The coal used in the passenger service is generally the highest price coal.

Q. That is lump coal?

A. Yes sir. Now these remarks regarding the division apply only as regards the maintenance of way of road tracks. In dividing the expense of yard tracks, in reporting to the Interstate Commerce [fol. 362] Commission we use the locomotive mileage made in the various yards, so therefore that differs somewhat.

Q. How about industrial tracks and those used only for handling freight?

A. They are directly assigned as far as practicable.

Q. Then your next item is Total Traffic $13,654.00, what is meant by that?

A. That covers the entire expense of the traffic department, beginning with the supervision, the outside agencies, the advertising, stationery and printing, industrial bureaus, and other expenses.

Q. The traffic department consists of the freight agents, men like Mr. Capron for instance, in his department; the men that get the business and adjust the rates and deal with the public, is that the idea?

A. Yes sir. It includes also the complete clerical staff of all of the traffic officers.

Q. Now the total General, what is that, $37,546.00?

A. That includes principally the expenses of general administration. By that I mean the salaries of the general officers and clerks in the general office building; stationery used there, and other expenses used there, which would of course include general office supply expense.

Q. How are they apportioned?

A. They are assigned to the freight service on the basis of respective train mile percentages in the freight and passenger service.

Q. On the basis of the number of train miles made by freight compared with passenger?

A. Yes.

[fol. 363] Q. Now you have them all but the legal department, where does that come in?

A. Under the head of general expenses.

Q. Now then, that gives you a total expense of $2,053,434.00 or an expense per loaded car mile of 34.71 cents, is that right?

A. That is correct, yes.

Q. Now for that amount of money the Northern Pacific produced the train movement shown in Exhibit 150-A or Northern Pacific Exhibit No. 16?

A. Yes sir.

Q. And that is the cost of producing that movement?

A. Yes sir.

Q. Now, then, to come to your loaded car miles of freight and empty car miles of freight, the total traffic loaded car miles of 5,915,707 is the number of estimated loaded car miles which was made at the expense of $2,053,484.00?

A. Yes sir.

Q. And dividing the amount of car miles by the expense gives the cost per estimated loaded car mile of 34.71 cents including the Puget Sound Terminals and main line of two divisions for those three months, is that right?

A. Yes sir.

Q. Now to get at the cost of the log traffic, please explain what you have done?

A. We have no actual figures available as to the expense of the log traffic, and the only way to build them up appears to be to base it on the cost of handling other commodities. Taking the line there "Ellensburg west"——

Q. That is for the reason that the logs all move in that territory?

[fol. 364] A. Practically all. I might state that our log movement in the State of Washington is practically confined to the run west of Ellensburg.

Q. So that any occasional movement east of Ellensburg would not affect the result?

A. Not to any extent, no sir.

Q. All right. You show then an expense, applying the cost per estimated loaded car mile as above at 34.71 cents—your estimated loaded car mile gives for the main line including the Puget Sound Division $105,132.42. Now explain how you got that figure?

A. That $105,132.42 showing the expense for the main line including the Puget Sound Division is based on the cost of 34.71 cents applied against the estimated loaded car miles of the log traffic that applied to the main line of 302,888 estimated loaded car miles, shown on Exhibit No. 17——

Q. In other words, you made 302,888 estimated loaded car miles of logs on the main line of those two divisions?

A. Yes.

Q. And you have multiplied that by the expense, 34.71 cents per estimated loaded car mile, which gives a cost of $105,132.42 as the cost of that log movement?

A. Yes sir.

Q. Now how do you ascertain the number of estimated loaded car miles made on the main line as distinguished from branch lines?

A. We have no actual division of the car miles on that particular [fol. 365] class of traffic, and in order to arrive at it it will be necessary to take the total cars of logs handled over the main and branch lines, as shown on the Exhibit, and use 100%, and we apportioned the loaded car miles on that basis.

Q. In other words, you show a total number of loaded cars of 41,783, of which 10,392 moved on the main line of the two divisions, and 31,391 moved on the branch lines, is that correct?

A. Yes.

Q. Then you found that the main line movement was 24.87% of the total, is that right?

A. That is correct.

Q. So you al-ocated 24.87% of the total car miles to main line and 73.13% to branch lines?

A. That is correct. But I want to bring out this point, that the cars handled as shown there, you will notice was 41,783 as compared with the number of cars of logs handled 25,215, and the reason for that division is that the reports of cars handled which we receive in some cases include a car that was handled twice; but it was the only fair basis we had of making the division between the main and the branch lines.

Q. I wish you would explain that a little further?

A. In the number of cars that were handled on main and branch lines you will notice the total is 41,783.

Q. I notice you have "number of cars handled" 25,215; is that on the main line?

A. That takes care of both main and branch lines, the entire movement, but in arriving at a basis for dividing the car miles between main and branch it was necessary to use this figure shown above, [fol. 366] even though it in some instances duplicated the cars handled.

Q. Please explain that?

A. Well, on account of double handling; a car might be handled twice.

Q. You mean re-consigned?

A. Well, either that or re-loaded twice.

Q. Well that was to take care of any minor occasion of the re-consignment or loading the same car twice?

A. That was the idea exactly, yes.

Q. Now where do you get your total of 41,783 cars?

A. That is on a special statement reported by the car accountant. It is not made a part of this Exhibit but can be made so if necessary.

Q. Now does that represent the total number of cars handled on main and branch lines of those two divisions during the period of three months?

A. Yes, making due allowance for the double handling, of course.

Q. So that the 10,392 were actually handled on the main line; you know that, you have that actual figure?

A. Yes sir.

Q. And 31,391 on the branch lines, and that is an actual figure?

A. Yes sir.

Q. And in order to determine the loaded car miles you simply divided the total loaded car miles in the same proportion that the cars moving on the main line bore to the cars moving on the branches?

A. Yes sir.

[fol. 367] Q. Is that a fair and proper basis?

A. That is the only method we know of whereby we can get it and it seems fairly accurate.

Q. But that of course does not affect the total number of cars handled but only the distribution of the car mileage?

A. Yes sir.

Q. Now, then, your figure, excluding Puget Sound Terminals, shows an expense of $1,041,057.00, and the cost per estimated loaded car mile of 17.60 cents, as compared with $2,053,484.00 expense, and a cost per loaded car miles of 34.71 cents. Now what is the reason for the difference in the cost in the column headed "Excluding Puget Sound Terminals?"

A. The difference is simply the exclusion of the expense of the run between South Tacoma and Keith.

Q. In other words that other column headed "Including Puget Sound Terminals" includes absolutely all of the expense of the run between Tacoma and Keith, known as the Puget Sound Terminal, is that correct?

A. It includes all of it but the train expense and the engine expense are not assessed against the Puget Sound Division but are shown in the Seattle and Tacoma Division.

Q. How about yard expense?

A. Yard expense is assigned to the Puget Sound Division direct and it is included.

Q. Now that would be correct if it were true that log cars didn't use that line between South Tacoma and Keith wouldn't it?

A. I would say so, yes.

Q. Now if as a matter of fact the log traffic does use that line then it should be charged for some proper proportion of the expense [fol. 368] should it not?

A. That seems very reasonable.

Q. Well, that should be charged the same as any other traffic that is using it?

A. Yes sir.

Q. Now what facts, what basis have you arrived at for actually determining their use by the log traffic——

A. We have an exhibit for the three months showing the number of cars that were handled in and out of the terminals, that is, freight cars, and we then determined what proportion the log traffic was of that figure, and the percentage, taking into consideration both the loaded and empty cars, which was 15.48%——

Q. In other words of the loaded cars actually using the Puget Sound Terminals?

A. Well, loaded and empty.

Q. Yes, loaded and empty.

A. 15.48% is the figure we arrived at for the proportion.

Q. For log cars?

A. Yes, for log cars.

Q. Now on that basis what proportion of the expense is chargeable against the log traffic by the Puget Sound Terminals, would it be that same percentage?

A. That is the way the percentage has all been assigned, on a pro rata basis of the terminals, and is fairly correct by that plan——

Q. What plan?

A. Why taking the Seattle and Tacoma Division main line, including the Puget Sound Division and checking that freight expense——

[fol. 369] Q. Now what plan are you talking about, is it a plan that is shown on Special Exhibit 150——

A. Yes, that first column, that 34.71 cents for expenses——

Q. Now isn't it true that on a car mile basis, charging the logs upon the basis of the number of loaded car miles of logs on that division as compared with the total loaded car miles, would bring substantially the same result as if you charged them on the actual loaded car basis instead of the car mile basis? What would be the difference, if any?

A. You mean if you were to estimate the actual number of cars handled on the Terminals and assign a certain proportion to the log traffic, is that the idea?

Q. Yes, instead of taking the loaded car miles. In other words by that method you would assign to the log traffic its proportion of the expense of maintaining the Puget Sound Terminals—that proportion which the number of estimated loaded car miles of log traffic bears to the total estimated loaded car miles of all traffic? By the other method you would use the loaded cars themselves in proportion to the number of loaded cars of logs as compared with the number of loaded cars of all traffic?

A. If we were to take only that 15.48 per cent of the freight expense of the Puget Sound Division and then use that as a basis for figuring our costs I don't think we would get a fair figure.

Q. Well, your idea is that it is properly distributed as it at present, on the basis of the estimated loaded car miles?

A. Yes sir.

[fol. 370] Q. One reason for that would be, wouldn't it, that a whole lot of bad order cars come in on that division, and if you used only a number of cars it would not be fairly representative?

A. The car basis does not seem quite fair.

Q. And at any rate the difference between the car mile and the car basis is not material?

A. It should not be, no.

Q. You can compute that. Instead of the 15.48% which you say would be allocated on the car basis you have allocated the per

cent that the number of estimated loaded car miles of logs bears to the total number as shown on the Exhibit?

A. Yes sir.

Q. I think it would be about as 15 compares to 17. Well, what is the result then, taking the cost as thus ascertained and comparing the revenue? Now you show your revenue to be $376,871.79, what does that mean?

A. That is the actual freight traffic revenue from log traffic as reported in the accounts.

Q. That is what was actually collected?

A. Yes, actually reported.

Q. And the total expense on main and branch lines is $430,130.00?

A. That is the total expense in connection with the log traffic as we figure it, yes.

Q. And the deficit is what?

A. $53,267.21.

Q. Now, then, that shows that even if the log traffic cost no more [fol. 371] per estimated loaded car mile than the average of all traffic, that you have a deficit of $53,267.21 for the operation for three months?

A. Yes.

Q. Now taking the next column "Excluding Puget Sound Terminals" what is that figure?

A. The revenue would be the same, naturally, but the deficit would be $1,443.08.

Q. And that would be if you excluded any part of the cost of the Puget Sound Terminals as against the log traffic?

A. Yes, bearing in mind that the train service and the engine service is charged directly to the Seattle and Tacoma Divisions.

Supervisor Cleland: Is that deficit of $53,267.21 on log traffic alone?

Mr. da Ponte: Yes, that would be the deficit which the log traffic alone incurs, upon the assumption that it costs no more to handle the log traffic than it does the average general traffic. Now we will follow this testimony up by some actual figures to show that the log traffic costs more per estimated loaded car mile than the average of the traffic on the divisions. So in reality the deficit on the log traffic is a good deal more than the average.

The Director: What proportion of the terminal expense have you assigned to the log traffic?

Mr. da Ponte: We have assigned it in proportion to the number of loaded car miles that logs bears to the total number of estimated loaded car miles of all traffic, which comes to about 17%. We have assigned the same proportion to the terminal expense.

[fol. 372] Mr. Calderhead: That is the estimated loaded car miles?

Mr. da Ponte: Estimated loaded car miles, yes, in order to take care of the empty movement.

Mr. Henderson: And you get your estimated loaded car miles by considering that two empties made one load?

Mr. da Ponte: In expense, yes. We get the actual empty car mileage and add one-half of that to the loaded movement.

Mr. Henderson: So that you are converting your empties into loaded car movement.

Mr. da Ponte: Yes, to take care of the expense. We figure that two empties cost as much as one loaded car; which is the uniform practice.

Mr. da Ponte:

Q. In fixing your estimate of the loaded car miles of logs, what proportion of the empty movement have you added?

A. On the same plan 50%.

Q. You will notice that the actual empty car miles of all freight is 1,748,362 as against loaded car miles of all freight of 5,041,526. Now, then, in your log traffic how do you figure the empties?

A. We figure that as the statement shows, and assumed that each loaded car necessitated an empty movement. That would give us, loaded car miles 811,923 and a similar number of car miles for the empty movement, and in getting the estimate of course we take the sum of the loaded and one-half of the empties, the same as was followed in the matter of the total division of the costs.

Q. In other words, in the log traffic it is necessary to make an empty movement equivalent to each loaded car movement?

A. In all cases.

[fol. 373] Q. It is at least that much?

A. Yes, at least that much.

Q. But in the general traffic the empty car movement is only about 35% of the total?

A. About 35% in the state of Washington.

Q. And that includes logs too?

A. Yes.

Q. So that if you would exclude logs from your total of all freight you would have a still less percentage than 35% of empty movement to loaded cars?

A. Yes, that is understood.

Q. Now is that one of the reasons—while we are on that—why necessarily the cost of the log traffic is greater than the average per estimated loaded car mile?

A. The main reason the log traffic is costing more is because of the fact of the short haul, the average haul on logs being as shown, 32.2 miles. Taking the State of Washington as a whole for 1920 the average haul of all revenue freight is 142.24 miles, including the log traffic.

Q. Well, let's come to the branch line operations before we get on to this other feature. Now in the extreme right hand column of 150-B, you have the Seattle and Tacoma Branch lines. Now you have those figures apportioned in the same way as you did on the main line?

A. Yes, on the same plan.

Q. Now how do you divide the expense between main and branch lines?

[fol. 374] A. The Seattle and Tacoma branch line expenses are directly allocated to the branches according to the actual expense.

Q. Do you know what that branch line expense was?

A. Yes, on the directly allocated expenses.

Q. Now have you stated what proportion of the total expenses is directly assigned, what percent is allocated?

A. No I have not shown that information here at all.

The Director: We will take a recess until one o'clock.

[fol. 375] Following the noon recess, the testimony of Mr. Peterson was resumed by questions and answers as follows:

By Mr. Da Ponte:

Q. Turning now to the extreme right hand column giving statistics for the Seattle and Tacoma Branch line, is that the same information for Branch line operation as you have testified to concerning main line operation?

A. Yes, sir.

Q. In other words the first figure $50,353 is the total station service cost for branch lines for these two divisions for that three-months period?

A. Yes, sir.

Q. And that is obtained in the same way and on the same theory as corresponding items for the main line?

A. Yes, sir.

Q. How did you segregate and *approportion* the main line expense from the Branch line?

A. The majority of expense pertaining to Branch lines is usually allocated, and the amount allocated is apportioned to Branch lines on certain B-C's figuring in different cases, as for instance a train run. The charge for train engines would be based on the distance of the main line as compared with distance on the branch line, and in the matter of fuel, the division between the main line and the branch line would be on the basis of locomotive miles for the division. All different plans vary, on the bases of car miles, train miles and locomotive miles.

Q. Are these methods, wherever used, the usual and accepted methods of performing the extensions between the main and the branch lines?

A. They are by the Northern Pacific and there have been no other adopted by the I. C. C. for these purposes.

[fol. 376] Q. So the I. C. C. has adopted that method?

A. They have made no formal adoption of it.

Q. You show for instance a total expense per loaded car mile on branch lines of $35.52, as compared with the expense on the main line of $17.60 cost excluding Puget Sound terminals. Please explain why expense on branch lines runs about twice as high as main line excluding these terminals.

A. That is not local to Seattle and Tacoma divisions, but applies to all divisions on the line.

Q. Is that practically universal in railroad practice?

A. Yes, sir, because of the fact that on branch lines you have got to maintain a certain amount of service whether business is there or

not; keep scheduled service, and there are certain elements that do not depend on business, so the branch line is considerably in excess of the main line.

Q. The proportion of double expense of the branch as compared to main line applies very well for that particular branch, does it not? The branch line expense is generally much more than twice as much as the main line per estimated car mile or per thousand gross miles?

A. It is on the Seattle and Tacoma divisions very favorable as compared with other branch lines.

Q. We have already pointed out, I believe, that 75.13 per cent of the total log movement of the two divisions is branch line movement?

A. That is correct.

Q. And 24.87 per cent is main line miles?

A. Yes, sir, that is also correct.

Q. I will ask you to state whether you have prepared a set of figures by which you have translated the expense per estimated loaded car mile into figures of thousand-gross-ton-miles?

[fol. 377] A. Yes, sir; I have done so for the purpose of determining what the estimated cost factor would be. Somewhat similar statement prepared shows that taking similar freight and expense, basing it on thousand-car-miles for the territory involved, that the net deficit on freight is $50,135.16, as compared with a deficit of $53,267.29 on the estimated car-mile basis.

Q. That variation is negligible.

A. I have indicated this, on account of terms used, between main line and branch line.

Q. Between what?

A. It became necessary to divide it into ton-miles, on the basis of Special Exhibit No. 17.

Q. That is on the basis of number of loaded cars on main and branch lines?

A. Yes, sir.

Q. So that your figures for gross-ton miles are actual figures?

A. Yes, sir.

Q. And the other figures involve that estimate on that division between main and branch line on the basis of the number of main line cars and branch?

A. Yes, sir.

Q. Could you expect any more—any closer correspondence between the two figures?

A. No, I am surprised they kept as close as that.

Q. In determining your weight for the loaded car-mile basis, what actual weight did you use?

A. Eighteen tons to the car.

Q. In estimating what you haul you used the weight of the car as eighteen tons?

A. Yes, sir.

Q. That represents the average weight of all equipment on the division, gondolas, logging cars, flats, refrigerators and all?

A. Yes, sir, average.

[fol. 378] Q. Is that reasonable and conservative?

A. It not only is—it has been proven by actual test. I took the Seattle and Tacoma figures and proved that out in total.

Q. What expense per estimated thousand-ton miles did you reach on these two divisions, for these branches?

A. By this method, $427,006.95. Exhibit 17 shows $430,139.

Q. How much per thousand gross ton miles for main and branch lines?

A. I figured that separately, giving you a little variation in cost, the main line $7.50 per thousand gross ton miles, and branch line $7.86.

Q. Or an average of what?

A. About $7.61 would be a fair average.

Q. So that at a total expense of——

A. $427,006.95.

Q. You made how many thousand gross ton miles?

A. Gross ton miles are taken separately by main and branch lines. Add them, and you get 54,952,569 gross ton miles.

Q. That is equivalent to 1,217,884 estimated loaded car miles, as shown in Exhibit 17?

A. Yes, sir.

There being no objection, the paper was introduced in evidence and marked N. P. Exhibit 17-A.

Q. So then, if the proper cost figures are obtained, the same financial result is attained whether you use the loaded car mile or thousand-gross ton mile basis?

A. Yes, sir, provided you restrict yourself to the territory involved.

Q. The same territory?

A. Yes, sir.

[fol. 379] Q. In other words, we know from actual computation what it costs the Northern Pacific to make a total number of loaded car miles; all you have to do is to transfer that into thousand-ton miles and use the figure of eighteen for the weight of the empty car, and you necessarily get the approximate result, allowing for slight variation in estimate of loaded car miles—as I understand you that represents, not the cost of moving logs on these divisions, but it represents the average cost of moving all of the freight?

A. That is proper.

Q. Before proceeding with this line I want to call your attention to Exhibit Special 150-C, Northern Pacific Ex. No. 18, which I offer in evidence, and ask you to explain that.

A. The necessity for this statement appears to be this: On previous notations, of Exhibit 17, we based it on the divisions of operating expenses as prescribed by the Northern Pacific, and it was considered proper to make a statement for the year so as to better show the business, and at same time have an I. C. C. statement. The statement as it appears, is divided between—as explained in the annual report to the State of Washington, and another factor was this, that the months of September, October and November, while

they might be good from the standpoint of involving new rates, they were exceptionally good months on the *the* Northern Pacific as far as freight was concerned. They do not represent actual business as clearly as 150-C.

Q. 18 covers the same statistics for the year 1920 as No. 17 for the three months indicated?

A. Yes, sir, except the division of expense was on the I. C. C. basis.

Q. The I. C. C. basis is that system of accounting prescribed by the Interstate Commerce Commission which railroads shall keep pursuant to Act of Congress in that regard?

A. That is correct, yes, sir.

[fol. 380] Q. And that is accepted method of railroad financing, and the one prescribed by law?

A. It is exactly as required of the Interstate Commerce Commission.

Q. And that is accepted by hearings and courts in every case?

A. I have not heard of it being, definitely, but the evidence in these cases was used though in that very manner.

Q. Taking the whole year's business as shown by Exhibit 18, and making the division between freight and passenger, what was the deficit on the logging operation?

A. We show here a deficit for the year of $539,334.48, based on expense, including terminals, and excepting the terminals, $318,-327.24.

Q. That includes nothing for taxes, or interest on value of property?

A. No, sir.

Q. But includes everything else?

A. It does.

Q. Your cost per loaded car miles for the year's operation of $37.91, stands against $34.07 for the three-months period?

A. It should be noted that the three months selected, September, October and November, were peak months for the Northern Pacific.

Q. On the branch line your expense per estimated loaded car mile for the year was $38.82, as compared with $35.52 for the three-month period?

A. The same plan would follow in this case on account of the three months not being representative of the year's business.

Q. Can you explain in what proportion, how this allocation is between freight and passenger business,—was made on what basis?

A. Yes, sir, I can explain that in detail. It is quite voluminous though. Speaking in a general way, the questions of train service [fol. 381] and engine service are assigned to freight and passenger and to mixed and in proportion to freight on the basis of car miles in mixed trains. On the division of the other questions there is a great deal of variation in each one, and it would require a considerable amount of detail to explain it account by account.

By Mr. Da Ponte: Inasmuch as this is the method prescribed by law for segregation, would it be desired to go into details—do counsel intend to attack that as an improper method of making segregation?

By Mr. Henderson: If we did, it would be a question of law instead of fact. I do not anticipate attacking the Interstate Commerce Commission's method of accounting.

By Mr. Da Ponte: If there should be an attack on it we would have the right to defend it?

By Mr. Henderson: Certainly.

Q. This statement includes not only the business within the State, strictly local, but a proportion of the mileage business of the interstate traffic, does it not?

A. Yes, sir.

Q. As you have explained, the average cost for estimated loaded car mile is $37.91 on the main line, and $38.82 on branch lines for the traffic moving over these divisions for that year 1920?

A. That is correct.

Q. Now then, you have applied that average cost to logging traffic and have reached a deficit of $539,334, as a deficit from logging traffic, charging expense to it upon the average that all through traffic cost for the year?

A. That is correct.

Q. Is that fairly representative, this figure $37.91, fairly representative of logging traffic, or is log traffic more costly than that average figure?

[fol. 382] —. $37.91 is based on the entire divisions and of course includes long haul traffic, but we know on account of the short haul of log traffic that the expense we show is not excessive, and if anything it is slightly less than it should be on that basis. In order to show the difference between long haul traffic and short haul traffic we can make a comparison between one of the divisions of the Northern Pacific where we have practically all interstate movement, taking the cost per thousand gross ton miles, on the Yellowstone division. It is the line running from Mandan to Billings, and the business is largely through, or long-haul, business. We found the cost per thousand gross-ton car miles for the months of September, October, and November, 1920, to be $2.71. Comparing this cost with the Seattle Division main line and branch lines, we have a cost of $5.07.

Q. For the same period?

A. The same period, and excluding the Puget Sound Division. There will be a showing that the cost of the short-haul business is considerably in excess of long haul traffic.

Q. If you add the Puget Sound terminals it would run it up to $7.61 as already explained per thousand gross ton car miles?

A. Yes, sir.

Q. Taking the average haul for all traffic in the State of Washington, what is the average mileage?

A. The amount reported as average haul, or revenue freight, in the State of Washington, taking both intra-State and inter-State is 142.24 mills, which includes the logging traffic, but the average haul of the log traffic is 31.4 mills as shown by exhibit 18 for the same period.

Q. What is the expense per thousand gross ton miles as shown by

accounts for interstate business in Washington, including proportion of interstate business?

[fol. 383] A. We show an operating cost of $5.50.8 per Intra state and interstate on gross ton mile basis.

Q. That includes log traffic?

A. Yes, sir.

Q. That cost of $5.50 per thousand gross ton car mile is comparable with cost of Seattle Tacoma division of $7.61 is it not?

A. Well, it reflects the lower cost of the other divisions outside the State of Washington.

Q. That is because of the extra length of haul?

A. It is that partly, and also the geographical location of the Westerly division between Ellensburg and Division points of the state line.

Q. That likewise includes the $5.50, includes the Washington proportion of the long interstate haul?

A. Yes, sir.

Q. So, if that were eliminated and the cost per thousand gross ton miles is strictly state business, it would run the figure still higher, would it not?

A. Yes, sir.

Q. Your figures give some portion of the Seattle Tacoma division, the average cost includes that portion of the interstate business on those divisions?

A. Yes, sir.

Q. If that were excluded, the cost were ascertained for strictly state business, it would again go in excess of $7.61 per thousand gross ton miles?

A. Yes, sir.

Q. Will you explain why the short haul cost more per thousand gross ton miles, or per estimated loaded car miles, than the long hauls?

A. Do you mean in proportion to revenue received?

Q. I mean net results of that show less favorably on short than long hauls?

[fol. 384] A. In short hauls you have got your terminals expenses to assume the same as in long hauls and the cut in the proportion of revenue is greater on the short than the long haul.

Q. Do we understand that means the expense per mile,—we are talking about?

A. Not necessarily expense per mile, but expense for handling the business; in other words the expense of conducting a short line is greater in proportion to revenue than the long haul.

Q. Greater proportion of the receipts?

A. Yes, absolutely.

Q. It does not make any difference what unit you use, gross-ton miles, net ton miles, or loaded car miles?

A. No, sir.

Q. Can you state what proportion of this expense are fixed charges against the traffic regardless of distance it may move?

A. That can not be established at present but we will endeavor to have it at the next hearing

Q. You will compile a statement showing what proportion of these charges are what is known as fixed or overhead charges which do not vary in proportion to length of haul?

A. Yes, sir.

Q. And what proportion of charges each bear in proportion to length of haul?

A. Yes, sir.

Q. And giving the items which go to make up each of the total amounts?

A. Yes, sir.

Q. With regard to interstate and state business, is there a method of apportioning the expense in the State of Washington to the State, and the interstate?

[fol. 385] A. There is no method that would be practicable for the reason that if you were to accept logging as a basis divided between intrastate and interstate, it would not be correct, nor would ton miles be correct; so we have to make a division of expense between intrastate and interstate.

Q. Is there an approximate masis by which you can apportion to Washington state intrastate traffic proper expense of business done in the State?

A. It may be done with relative proportion of net ton miles, but is — questionable whether it would be a fair basis.

Q. It would be as favorable to State traffic as it ought to be?

A. I think so, yes.

Q. Make up a statement on that basis—can you state what portion of net ton miles in this state and interstate, and what proportion is interstate?

A. Exact figures are compiled, and shown here.

Q. In what exhibit?

A. Marked Special 190.

By Mr. Calderhead: You are not taking State and interstate expense on net ton miles, are you, Mr. Da Ponte?

By Mr. da Ponte: If there is any better basis I would like to suggest it and we will compile it on such basis.

By Mr. Calderhead: All state traffic would have two terminals, and interstate one terminal expense, and that would be a difference bearing on the traffic, and a comparison between state and interstate net ton miles would not be very useful as a basis for comparing expenses.

By Mr. Da Ponte: What basis would you suggest?

By Mr. Calderhead: I would rather the witness would tell.

A. Taking the revenue, net ton miles in the State of Washington for the year 1920, we have made an extra statement. 452, 784, 759 net ton miles, equalling 27.62 per cent of total intrastate and interstate.

[fol. 386] Q. In other words, the local business is a little more than one fourth of the total?

By Mr. Calderhead: I do not want to interrupt you immediately, but on your statement No. 18, including the Puget Sound terminals, there is shown an operating expense of $8,600 and Seattle excluding terminals, $4,400. That woulld indicate that net ton miles would not have any bearing on operating expense where your terminals——

By Mr. Da Ponte: It might show what proportion you should allocate to interstate business?

Q. At any rate, whatever figure be accepted, is it the fact that the interstate business is much less expensive than the intrastate?

A. That is always the case.

Q. To whatever extent that may be, the figures contained in your Exhibit 150-C, which is No. 18, are favorable to the log traffic by whatever the state business is more expensive than the interstate?

A. That is correct.

Q. Do these figures of total expense include transportation of company material—company freight?

A. No, they do not. We have an account, Transportation, for Investment, credit.

Q. I mean for moving company material?

A. The expense is included in the cost as shown for all traffic, but we have not set off any proportion against log traffic.

Q. I find a charge log traffic here in expenses for transporting company material.

A. We have charged them a proportion because we are basing our cost per car mile on the cost including the cost of handling the company material, but we have not in any way increased the log car miles after correction for additional material.

Q. What proportion of the total freight is handled as company material

A. In a general way about twenty per cent.

[fol. 387] Q. What is that estimated business?

A. It is an actual figure as compiled from the records. Taking the State of Washington for the year 1920 we find that out of the total ton miles of 2,009,495,141, we have 370,633,413 of non revenue freight.

Q. That includes coal hauled for locomotives, I guess——

A. It includes all material.

Q. Free material?

A. Yes, sir.

Q. If that were charged, the like proportion were charged, to what extent would that increase the charge expense for estimated loaded car mile for log traffic—would it be substantially twenty per cent?

A. In that neighborhood, yes.

Q. Give the figure as near as you can reach it?

A. In other words, it would seem proper accounting to take $37.91

Q. Estimated loaded car mile?

A. Consider that about eighty per cent of the actual cost.

Q. Is that the method used in the trial of the North Dakota Lignite Case?

A. I do not know as it was used in that case, but it has been done in other rate hearings. Of course that would not apply to charges outside of train operation,—what we call train operation.

Q. What proportion of expense is that overhead? The substantial additional amount chargeable to log traffic is not complete?

A. No.

Q. I call your attention to exhibit marked Special 159,—please state what that is.

A. Exhibit 19 we will call that, a statement showing intrastate traffic on logs and all through carloads and the number of cars tons, ton-miles, revenue, are all compiled from the auditor of freight receipts from the way-bills. This statement only covers eleven months [fol. 388] of the year, but a supplemental statement was rendered for the month of December so as to give the year's figures, which appear on N. P. No. 18.

Q. That shows the revenue per car mile of logs $12.01. What does that mean?

A. That is per car. That is the actual division,—dividing car-miles into revenue.

Q. As compared with all other carload traffic within the state the revenue is $56.50. That $56.50 revenue from all other carload traffic is obtained by dividing the revenue by the number of car miles you have?

A. Yes, sir.

Q. All included within Washington—intrastate business?

A. Yes, sir, all strictly local.

Q. Is that another proof of the relative unprofitableness of the log-traffic as compared with the general traffic of the State?

A. It is not proof of unprofitableness,—is not making the amount of money on that business; I would not say unprofitableness, but, rather, less money than on through traffic.

Q. Standing alone it would not indicate a profit?

A. No, sir.

Q. That contains a showing of average car earnings local to Washington of $85.29.

A. Yes, sir, that is interline.

Q. Are these illustrations of difference in revenue from long haul and short haul on the principal car earnings?

A. No, I think their difference is in the matter of what the traffic will bear, as you might say.

Q. Your number of cars of logs moving during this period being eight months to August 1920, shows that the log traffic had 71,785 cars as compared with all other kinds of traffic within the state, locally, of 66,421 cars?

A. Yes, sir.

[fol. 389] Q. In other words that shows that the log traffic exceeds the number of cars of other strictly local traffic of Washington?

A. Yes, sir.

Q. And the same comparison with regard to the tons,—down each column?

A. The same comparison applies all the way through on that statement as regards these two cases specified. The figures are compiled on the same basis.

Q. Did you compile a statement showing cars handled in exclusive log trains as compared with other commodities?

A. They were compiled at our direction by the car accountant.

Q. Please refer to that exhibit, Northern Pacific Ex. No. 20. What is that statement?

A. Showing cars handled in exclusive log trains, and logs handled with other commodities. We show the number of cars for September, October and November. It must be borne in mind that these cars may be in some cases duplicated on account of being moved from one place to another.

Q. You mean re-billed?

A. Yes, sir.

Q. That would be a very occasional matter?

A. Yes, sir.

By Mr. Calderhead: Log cars would show duplication of car numbers frequently, would they not, in three months?

By Mr. da Ponte: Not any more when they were in trains by themselves than where with other cars, so that would not affect the relative results, would it?

A. It would affect the number of cars in connection with cars actually handled.

[fol. 390] Q. The duplication would not affect the proportion between cars in exclusive trains and others?

A. No, that would not be affected.

Q. That would show the number of cars in logging trains as compared with other freight—what are the percentages?

A. Taking the Seattle division as a unit we have a total of 4,501 cars in exclusive logging trains, as against 7,889 with other commodities and on the Tacoma Division we have 9,216 exclusively in log trains and 13,400 with other commodities.

Q. The importance of that is, as I understand it, that where the logs are handled with other freight, it increases your switching, and increases the expense of handling the cars?

A. That is all, yes, sir.

Q. That is the purpose of that exhibit?

A. Yes, sir.

By Mr. Calderhead:

Q. Was not that introduced at a former hearing,—but just one copy?

By Mr. da Ponte: Yes, sir.

By the Director: That will be admitted, and marked Exhibit 20, when the required number of copies are admitted. It will be denied at present.

By Mr. da Ponte: We take exception to the ruling.

Q. I will call your attention to Exhibit Special 150-D, which may be marked as Exhibit N. P. 21. Please explain what this is.

A. To show what the expenses would have been in September, October and November, 1920, if the proposed change in rates on July, 1921, had been in force at that time, and it was arrived at in this manner: We determined the relative proportion of decrease in labor in maintenance of way and structures, transportation, maintenance of equipment, trains and engines, and miscellaneous operation and [fol. 391] applied these reduced percentages against labor charges for these three months as included in statement 150-B. You will note that under this plan we show a slight saving excluding the Puget Sound Division, of $27,000, but a deficit of $20,958 by including the Puget Sound Division.

Q. In other words, that is to show what the effect would be of the proposed order of the Federal Labor Board making a reduction in wages which will be effective July first, 1921?

A. That is the idea, yes, sir.

Q. And that reflects what the Division would have done had the wages which supposedly will take effect July 1, 1921.—had they been in effect in September, October and November, 1920?

A. Yes, sir.

Q. It would show a slight saving in expense from that reduction?

A. Yes, sir, and it also results in net saving in one instance, excepting the Puget Sound Division.

By the Director: Is there any objection to the admission of the Exhibit? It will be admitted.

Q. All of the rates you have based your exhibits on today were rates under the 25% increase of 1920?

A. They include that. The increase of rates is exactly as allowed and practically cover only four months of the year. This straight tariff revenue shown on this statement, by the way the tariff has all been confined to what we actually received. That had nothing to do with demurrage of switching.

Q. In these accounts in 150-B for instance, Exhibit 17, are any expenses allowed for extraordinary contingencies, such as floods, and things of that kind, Mr. Peterson?

A. The statement of September, October and November is based on actual ordinary expenses of those three months.

Q. Does not reflect any extra expenses, floods, wash-outs, or fires, or things of that kind?

A. No, sir.

[fol. 392] Q. You have a certain percentage of expense which does occur from these items sometimes, do you not?

A. We do have extra charges sometimes that fall to a preceding period, but we made the copy of this statement on the actual business for those three months involved. Before making a statement for the year, the figures are exactly as reported to the state.

Q. There did not happen to be during that year 1920 any such extraordinary expense?

A. We had nothing out of the ordinary during that year, no, sir.

By Supervisor Cleland: How do you explain the allocation for floods? Do you apply them during the months, or apply them over the period of a year?

A. Ordinarily they would show up in the accounts in the month when the expense was paid or taken up.

Q. In your estimated statement of November, 1920—it might be covered in November, or when?

A. I would take in the entire amount of expense at that time, regardless of what period it pertained to. But as I said the figures for September, October and November, do not include anything extraordinary,—only the regular monthly run of business.

Cross-examination.

By Mr. Henderson:

Q. The year 1920 was abnormally high for operating expense, was it not?

A. It was on account of wages, but hardly what you would call out of the ordinary.

Q. And generally said by the railroads that the increase of their wages, in 1920 was what has made the greater part of their deficit?

A. That is conceded, yes.

[fol. 393] Q. Turning to exhibit No. N. P. 17, I understood you to say that in translating your empty car miles into loaded car miles you considered two empties equal to one loaded?

A. Yes, sir.

Q. With reference to log traffic, 7,000 minimum, or something over 8,000 pounds to the thousand feet as your figures show, you would have something in excess of three empties for one loaded car, would you not?

A. Our empties were returned a little better than a hundred per cent of loaded.

Q. In translating empty car movement you would have to use three empties to make one loaded car?

A. I would not think so.

Q. A log flat weighs about fourteen tons. 7,000 feet at 8,000 pounds to the thousand would be twenty-eight tons, and at fourteen tons to the empty, that would make three empties to one loaded car, would it not?

A. In this plan of ours I divided the empty car miles by two—it is based on a little different situation from that.

Q. That is what I am getting at. But when you get down to log traffic you are at least 33 per cent off, aren't you, if these figures I gave you are correct?

A. According to our figures the log traffic was 8,923 car miles, and we allow a similar figure for empty movement——

Q. Translating them into loaded car movement you used two empties for one loaded?

A. Yes, sir.

Q. You have actual empty car miles, not estimated?

A. No, sir.

[fol. 394] Q. Translating that into loaded car miles you estimated two empties for one loaded car, didn't you?

A. No, it works around the other way. We have actually loaded cars, 811,923 loaded car miles and we show a similar number of empty car miles, assuming that each loaded car necessitated an empty movement.

Q. When you translated that estimated empty car miles, you used two empty cars for one loaded car, didn't you?

A. Yes, sir.

Q. If my figures are correct you should have used three empty cars to one loaded should you not?

A. My measure of cost was that it would require twice as much expense in connection with loaded as empty equipment.

Q. You are trying to get at loaded car miles in order to apply these figures on Exhibit N. P. 17?

A. Yes, sir.

Q. You did apply them on the basis of loaded car miles?

A. Yes, sir.

Q. To get your estimated expense. You had the actual number of loaded car miles, didn't you?

A. Yes, sir.

Q. And you estimated that there would be an equivalent number of empty car miles on that equipment?

A. Yes, sir.

Q. Getting that empty car movement ou- of the loaded car miles you estimated two empty cars to one loaded?

A. Yes, sir.

Q. In arriving at your expense, you compiled your expense figures on that basis?

A. Yes, sir.

Q. If it is true that it takes three empties to make one loaded car in the log traffic, that would make a great deal of difference in your [fol. 395] figures, would it not, for instance take the last figure which you have on exhibit N. P. 17, 1,217,884, of loaded car miles—if you had used three empties to one load you would have had 1,082,564—is not that approximately correct?

A. Is it not a fact that to be consistent where we build up a cost of 34.71 on the expense of the division in November, and used a basis there of two empties to one loaded car, we have to be consistent in getting our figures down——

Q. Did that figure 34.71 have anything to do with it?

A. Yes, sir, we used the Seattle Tacoma divisions. If you do not do that, that would show an estimated loaded car miles which I do not think is quite fair.

Q. If it is a change in figures, don't you think the figures ought — be applied according to known facts?

A. Yes, if we had any known facts, in all cases.

Q. You have a tariff providing for a minimum car load?

A. Yes, sir.

Q. You have estimated on your own exhibits what a thousand feet of logs weighed, and you know what sized logs for every one?

A. Yes, sir.

Q. You have actual facts to apply figures to?

A. Yes, sir, as far as logs have been concerned.

Q. Isn't that what we apply these figures to, log traffic?

A. My idea is simply this, that if we establish a cost of 34.71 based on loaded-car-miles and assume in that cost, a service on two empties to one load, that when you come to figure any other traffic you must adopt the same policy.

[fol. 396] Q. But if it is true for us to show a 33% discrepancy, then it is not fair to follow that basis, is it?

A. If we were to reduce our estimated car miles on the Division to the same basis, that would increase your expense.

Q. But through loaded traffic in box cars does not figure out three to one like it does in logs, does it? It figures out according to your figures two to one?

A. That is the standard accepted plan.

Q. Referring to your deficit shown on exhibit N. P. 18 of $539,334.48 on log traffic, that is more than the whole entire deficit for the State of Washington for that year, is it not, in some two hundred thousand dollars,—you have shown almost two hundred thousand dollars more deficit in the log business than the entire State showed in all business.

A. The deficit for the State is something more than a million dollars.

Q. On freight traffic?

A. Yes, sir.

Q. On the Northern Pacific for 1920?

A. Yes, sir, one million and over, and that checks with the State Commission figures.

Q. Did you check your freight traffic alone with the State of Washington?

A. It is based on these figures here merely as shown, freight. We show $1,382,000 for the State of Washington on all freight.

Q. That is the figures shown by the log shipments, and put in later?

A. No, we are dealing entirely with this situation here.

Q. I want to know whether or not Exhibit 18 don't show a greater loss in log traffic than the annual report shows for the Northern Pacific from the entire State of Washington in entire year?

By Mr. da Ponte: If you want to show that the other traffic made it up, we will admit that the other traffic made up this deficiency.

[fol. 397] After a recess of five minutes, the Cross examination of Mr. Peterson was resumed by Mr. Henderson, as follows:

Q. After having made computations, can you answer the questions I was getting at, namely, that your exhibit 18 apparently

shows a greater loss from the log traffic than the annual report shows for the entire freight operation of the State?

A. You mean as confined strictly to freight revenue as it stands?

Q. Yes, including the freight and switching revenue, incidentals, storage and demurrage; your net deficit for 1920 in freight operation was $363,668—is that correct?

A. You mean considering freight only, $21,282,087.21. For freight revenue both intrastate and interstate, $20,115,553.27; switching $620,072.74; through freight train revenue, $327.67; storage on freight I think is $33,872; demurrage $138,344. That gives us a deficit of $333,667. These figures are based strictly on freight tariff revenue and include a proportion of switching and demurrage.

Q. You did not include that?

A. No, sir.

Q. If you did, it would reduce that deficit?

A. By a small amount, yes, sir.

Q. Can you give those amounts as applicable to log traffic?

A. Yes, sir.

Q. For the year 1920?

A. Amount of switching is only $4,225; storage, nothing; demurrage —, a total of $16,635, which should be added to logging operations.

Q. You have not any other items?

A. No, sir.

Q. Your figures would not make any material difference in this?

A. No, sir; it was so small.

Q. In arriving at your gross ton miles in the log traffic you used [fol. 398] the figure of 18 tons for an empty car?

A. Yes, sir.

Q. Have you any log cars on your system that weigh eighteen tons?

A. Well, we were not trying to bring in log cars, but merely to equalize the showing as far as B. C.'s were concerned, to show that no matter whether you take car miles or gross ton miles you would show the same general result.

Q. In using your gross tons you used about four thousand more than the correct weight. In order to get your gross ton car miles and in getting your loaded cars, you used two to one instead of thre to one?

A. In the matter of gross ton miles that is the actual figure as computed, not an estimated figure at all. It is shown on statement 115-A.

Q. That is on the statement of the system as a whole, but on log traffic you used eighteen tons a car, did not you?

A. Yes, sir.

Q. You computed your actual gross ton mile for the State or system—you have that?

A. For the Seattle and Tacoma divisions it is shown there.

Q. And when you came to apply these figures to log traffic you used eighteen tons to a car, is that correct?

Objected to by counsel for Northern Pacific.

Q. In arriving at your entire gross tons did you figure eighteen, or did you take actual gross tons?

A. Actual gross tons.

Q. In arriving at log traffic, you estimated eighteen tons to a car to get the gross tons on log traffic,—didn't you?

A. Well, but if you will——

Q. Is that what you did?

A. Yes, sir, but refer to your 150-C and you will find eighteen tons is about the average weight on Seattle and Tacoma divisions. [fol. 399] Q. That is through business only. You get down to log traffic and you didn't have actual gross tons, did you?

A. No, sir.

Q. You estimated actual gross tons by using eighteen tons to a car?

A. Yes, sir.

Q. When as a matter of fact standard flats, as stated awhile ago, weigh fourteen tons?

A. That is an operating matter entirely, I think.

Q. Did you ever compute from your list the weights,—what the weight of your log cars are?

A. I think that would be matter for the operating department to pass on rather than the accounting department.

Q. If the actual weight of your logging cars are fourteen tons instead of eighteen, you are off four tons per car in computing your log cars at eighteen,—is that correct?

A. Yes, sir.

Q. I will refer to your exhibit 17-A in which you computed the gross ton miles of log traffic. In that exhibit you used 18 tons per empty car to arrive at estimated gross ton miles in log traffic, did you not?

A. That was worked out on the same theory as estimated loaded car miles. That is where you used one basis in one and you did it in the other.

Q. You did that?

A. Yes, sir.

Q. As a matter of fact the average weight of log flats is fourteen tons. When you made that computation you are four tons per car off on the gross ton miles for log traffic,—is not that true?

By Mr. da Ponte: As I understand that exhibit, it reads average weight on that division, and not log flats.

[fol. 400] By Mr. Henderson: He has testified his exhibit shows actual gross ton car miles on all traffic, but when he tried to find out gross ton miles in log traffic he had to estimate, and in doing it he used eighteen tons per car, and if it is not correct I would like to have witness correct me, and not counsel.

By the Director: Answer the question.

A. In my judgment in this proposition we were figuring on the basis of the Division movement.

Q. Is that the way you estimated the gross ton miles, by assuming eighteen tons to the empty car, whereas on Exhibit 18 you have actual gross tonnage for all traffic in these two divisions?

A. Yes, sir.

Q. Referring to your exhibit 19, which is special 159. Referring to the average revenue per car of logs, $12.01; entire line $89.23; counsel asked you if that showed that the log traffic was comparatively less profitable than the other traffic and I understood you to answer it indicated it; is that correct?

A. It does indicate that it is.

Q. Take the next item, which is the average rate per car mile; logs .30503 in the State of Washington. Entire line .2620. I will ask you if, by the same token, does that indicate that the logging traffic is more profitable than the entire traffic of the rest of the entire line?

A. When your revenue per car mile does not take into account the short haul.

Q. You get that per car mile.

A. A short haul is not producing the share of revenue that a long haul does.

Q. It produces greater revenue than a car mile of traffic on the entire system.

A. It may be, and never produces its share of revenue in propor-
[fol. 401] tion to business.

Q. Would you have any long hauls if you did not have these branch line short hauls?

A. That seems to be rather an unfair question.

Q. You were attempting to explain the proportion that log business should bear to entire system. You would not have much business on the main line if you did not have branches to feed it?

A. It is very true, but we are studying now not that feature but actual cost of service.

Q. We are dealing with the other feature too; it may cost more on the branch line. If the branch line should make the main line possible. Can you state your percentage of loss on carload basis, to entire business? I ask because your exhibit 19 only shows carload traffic.

A. We have a statement here in the report we show to the Commission that shows that information, taking the State of Washington as an entirety for the year, we show that our L. C. L. business shows but 2.2 per cent of the total.

By Mr. da Ponte: I take it that these reports may be considered in evidence for all purposes.

By Mr. Henderson: We would be glad to have that as a stipulation; that we may use these reports for purposes of the trial.

By the Director: With the understanding that any parties desiring copies of these reports put into the record will have copies made, we will consider it as part of the evidence.

Q. Can you give us any idea of the relationship between the cost of operation in less than carload lots and in carload movement?

A. I cannot at present give definite figures; I have ideas but they are not definite enough.

Q. There is a great deal of difference between cost of operation in less than carload lots?

A. Yes sir, in every carload business, of course.

[fol. 402] Q. In these figures which you have prepared with reference to freight operation you have included cost of less than carloads?

A. Yes, sir, but only to extent of 2.2 per cent in the State of Washington, and it seems that the proporion is so very small it would not seriously affect the business.

Q. The proportion of the busines being small, or the proportion of the cost of operation being several times less for carload lots—The fact that the log business is done almost entirely, or is entirely—carload business reduces your percentage of less than carload business, does it not?

A. You mean reduces the cost if we would reduce—eliminate less than carload business to the roads in the State of Washington?

Q. Yes.

A. No, for less than carload business is only 2.2 per cent.

Q. Log traffic is approximately 35%, between 30 and 35% of entire business?

A. I think it is 35.53%. That covers not only log business, but logs, posts and cord wood; the greater part of it would be log business; 30 to 35% would be a fair basis.

Q. That is entirely carload movements, is it not, the log business?

A. Yes, sir.

Q. About what percentage of the log traffic is moved in train loads?

A. About two-thirds.

Q. It is all moved in car loads?

A. That I think would have to be certified by the operating department.

Q. Cost of operation of a trainload is much less than of less-than-carload lots?

A. That is assumed as proper, yes.

Q. Cost of trainloads is less than of carloads?

[fol. 403] A. That is assumed, yes, sir.

Q. Do you know anything about revenues on less than carload lots as compared with carloads?

A. Yes, sir, but I have no figures exactly on that here.

Redirect examination.

By Mr. Da Ponte:

Q. Did you state whether gross earnings per ton from less than carload lots were higher than by carload?

A. Absolutely.

Q. So that offsets the expense?

A. The thing I have in mind is the small amount—2.2 per cent. It is quite negligible as far as the State of Washington is concerned, and more so as far as the Western business is concerned.

By Supervisor Calderhead: On this exhibit 17 you give the total station service $309.000, or 5¢ for loaded car mile. Certainly there can not be a great deal of station service in handling logs.

A. No, that is admitted.

Q. Five cents for loaded car mile would make quite a difference in net earnings of the Northern Pacific for those three months?

By Mr. da Ponte: We will have an operating man show to what extent that is so.

By Mr. Welch: Percentage of less than carload business is 2.2. Is that tonnage or receipts?

A. That is only the tonnage; we have no available records of the amount of money; it is procurable but we haven't it here. Our State report shows that on the entire state, 10,219,535 tons, of which there was L. C. L. 224,622, or 2.2 per cent. But I have no revenue figures available.

[fol. 404] Q. As I understand you were not testifying as to distribution between operating departments on these items of expense which involve matters of operation, but you have only the records from the accounting office?

A. Yes, sir.

Q. On Exhibits 17, 21, and 18, under items other accounts the figure is in red——

A. That "other account" includes joint facilities account. We have both debit and credit accounts and where an amount is shown in black it shows the amount we are paying out instead of getting. We had joint facilities in there, which showed the amount in red because it is the other way around.

Q. Will you state what you excluded in the Seattle division, that Mr. Calderhead inquired about.

A. Did you mean the Puget Sound division?

By Mr. Calderhead: Exhibit 17, 150-B, which is your 150-D, shows Seattle and Tacoma main line including Puget Sound Terminal, $309,874, as total station service. If you exclude Seattle and Tacoma division or rather the Puget Sound Terminal or station service amounting to $46,453, it indicates that a very large amount of your station service is in Seattle and Tacoma, and that is where your large less than carload business is handled?

A. That is proper.

Q. It is ascertainable what are the amounts of charges for loaded car for terminal service and that it would not run anything like the figure that it would for less than carload?

A. That is admitted.

Q. With the result if you deduct approximately five cents for loaded car mile your total operating expense then for logs is practically reduced a hundred thousand dollars.

By Mr. da Ponte: It shows at the bottom, "excepting Puget Sound Division" $41,408 for three months. To what extent you should

exclude that is to be determined. We maintain that if it be ad-
[fol. 405] mitted that logs should not be charged equally with other traffic, there should be some charge made against logs for expense of those terminals, and what that charge should be is one of the debatable items, and one of the principal debatable items in the case.

By Mr. Calderhead: One other item which I think is important. The number of miles of branch line in this State as compared with the number of miles of total branch line, because I think Mr. Peterson said the operating expenses on the branch line were practically double that of the main line.

A. We do not show any division of mileage between branch lines. We show branch lines of the State of Washington. I will have to make a note of that and get it.

By Mr. Calderhead: It is more expensive to operate branch lines where the proportion of branch lines is heavier than on the main line, and that is the reason your operating expense through the Yellowstone is only about one third of what it would be on Seattle and Tacoma divisions.

A. As a matter of course it is largely due to geographical conditions. We have to have helpers on Seattle division; that is one of the reasons for it. On the Yellowstone division they have nothing to do but to run trains right through.

By Mr. Calderhead:

Q. Branch lines to main lines make operating expense on main line proportionately cheaper?

A. Yes, sir.

By Mr. Calderhead:

Q. Log operation includes both terminals and that makes expenses run up?

A. If we temporarily disregard the terminal feature entirely and take the year's operation we still show a deficit of $318,000 on log operations, without attempting to allocate any part of terminal expenses to log traffic.

By Mr. da Ponte: That is on exhibit 22?

A. It is a very large item.

[fol. 406] By the Director: What do you mean by helper service?

A. On the whole line from Ellensburg, we have a statement prepared showing, from January, the cost of operation of the main line and branch lines for entire system, whole cost, train miles, ton miles, and per mile, and also freight and passenger service, and showing conclusively the branch line cost is always heavier and also show varying cost, on account of grades that require helper service on Seattle division.

By Mr. Calderhead: Seattle is one of the most expensive divisions?

A. Yes, sir.

By Mr. Calderhead: In 125 miles Seattle to Sumas there is nearly a hundred miles of lumber camps, practically one camp?
A. A good many.

By Mr. da Ponte: Would not that be a question for one of the operating department witnesses? This man is a St. Paul resident and in the accounting department.

By Mr. da Ponte:

Q. Will you explain what items are in that station service?
A. Referring to Statement 150-B——

By Mr. Calderhead: We have a uniform accounting system——
By Mr. da Ponte: This is for Mr. Albee.

A. The $309 that we show for September, October and November, 1920, for Seattle and Tacoma main line Puget Sound Division represents accounts directly charged to freight service for the following accounts. Station employees, first account; Station supplies and expenses; and there is weighing and inspection, and demurrage, and operating joint yards and terminals, debit and credit accounts. In addition to amounts directly shown to freight, we have also an operation on train mile basis for the three months, a proportion of all the common charges—these amounts make the account possible from the above items.
[fol. 407] Q. Take station expense, for instance, concerning logs.
A. That is separated over all Divisions. There is nothing assigned to log traffic at all in this particular statement, but all put in one item.
Q. So that the proper—as to whether or not log traffic participates equally in all of these individual items you are not undertaking to say—that would be for the Division Superintendent to speak of?
A. Yes, sir.

[fol. 408] W. C. ALBEE, a witness produced on behalf of the Respondent Northern Pacific Railway Company, after being first duly sworn, testified as follows:

Direct examination.

Mr. da Ponte:

Q. State your name?
A. W. C. Albee.
Q. What is your occupation?
A. Superintendent of the Tacoma Division of the Northern Pacific Railway Company.
Q. For how long have you been such superintendent?
A. 18 years.
Q. Now what lines does your division include?
A. All lines from Tacoma east over the Buckley line branches,

including a number of different branches, and west to Grays Harbor and Willapa Harbor, and south to Portland.

Q. The Buckley line and branch including the railroad up to Buckley and Enumclaw, up to a connection with the main line at Kanasket?

A. Yes, although the Buckley line includes the Palmer Cut Off.

Q. And that is the line that runs to Fairfax and all of those lines——

A. Yes sir.

Q. And how long have you been superintendent?

A. I have been an operating officer on the Tacoma Division for 30 years, 18 years superintendent.

[fol. 409] Q. Now before going into detail matters there are one or two questions concerning the testimony of the preceding witness that I want to ask you about. Now some criticism was made with regard to the use of 18 tons for the weight of these logging cars; now state whether or not that is justified, and if so on what theory?

A. I think that the actual tonnage of 14 tons as stated by Mr. Henderson is probably approximately correct, but I think the theory of using 18 tons for the empty car in comouting the figures as outlined by Mr. Peterson is fair, for the reason that the empty mileage on log flats is very much greater than the average mileage on all clauses of equipment. The average on my division for all classes including logs is approximately 65% loaded and 35% empty; whereas in moving logs, under the most favorable circumstances, an average of 50% each, loaded and empty, is the very best obtainable, and I think that the average of log flats is nearer 35% loaded and 65% empty, on account of the inevitable cross haul of loaded and empty cars which is involved, which I can show later and explain to you in detail.

Q. That is what I want you to explain, how much greater the empty log car movement is than the loaded, and why that is so.

A. I know that it is true for a great many reasons. In the first place there is an exhibit which has already been introduced which shows the shipments which have been made from points on the Tacoma and Seattle Divisions, of logs moving both east and west.

[fol. 410] Q. Now what Exhibit are you referring to?

A. It was presented at the previous hearing, showing point to point movement.

Q. That was the one furnished at the request of Mr. Calderhead?

A. Yes.

Mr. Calderhead: That is Northern Pacific's Exhibit No. 3.

Mr. da Ponte: I didn't think that was given a number. It is that exhibit showing the point of origin and point of destination for 8 months ending August, 1920, and 3 months ending November 1920, separately?

Mr. Calderhead: That was marked Exhibit No. 3 at the previous hearing.

Mr. da Ponte: Was it? Exhibit No. 3 was one of the traffic exhibits furnished by Mr. Capron.

A. The one I mean is the one showing the movement ending the first 8 months of 1920, and the three months ending November 1920, point to point.

Mr. da Ponte: You have that exhibit Mr. Calderhead?

Mr. Calderhead: Yes.

A. (Continuing:) Well, that exhibit shows a cross-haul something as follows, just to give a few specific movements:

American Lake Shipments to Orting and Puyallup

Shipments of logs from points on Orting Branch and Buckley Line to Tacoma, the logs from American Lake moving east, and the logs from Orting Branch and Buckley line moving west. Also logs from American Lake to Hoquiam and Cosmopolis moving west, while logs from Gibson and Bordeaux on Olympia Line moving east. Ship- [fol. 411] ments of logs from Little Rock to Hoquiam moving west, and shipments of logs from Gibson Creek to Olympia moving east. Shipments of logs from Enumclaw to Eagle Gorge moving east, and shipments of logs from Halmar and Buffelen Spur on Green River Branch moving west. On South Bend line shipments of logs from Bunker near Adna to Bucoda and Centralia moving east, and logs from Winlock on the main line moving west to McCormick. Shipments of logs from Napavine on the main line moving west to Winlock, and shipments from Winlock moving east to Napavine. South Bend line shipments from Starr Spur near Lebam moving east to Tacoma, and logs from Bunker moving west to Doty. Also shipments from Starr Spur moving west to Nalpee, and shipments from Nalpee moving east to Pe Ell. Shipments of logs from Olympia to McCleary moving west, and shipments of logs from Moclips to Puyallup moving east. On the Prairie Line, shipments of logs from Mentzer Spur near McIntosh moving west to West Tenino, and shipments logs from West Tenino moving east to Tacoma. Chehalis shipments moving east to Tacoma, and Mendota shipments moving west to Chehalis. If you will consider that carefully you will see the exceedingly complicated nature of furnishing cars for a haul of that kind, which necessarily involves a great deal of additional expense both for road movement and switching and involving the cross haul of empty cars, which I think proves my contention, that the empty haul on logs is at least 30% greater than the empty haul on all classes of equipment even including logs, and I think that would fairly account for the loading, which as I understand was made on those figures of 14 tons per empty car instead of 18, which is about 30%. [fol. 412] Mr. da Ponte: It is the other way around, you mean 18 instead of 14?

A. Yes, 18 instead of 14.

Q. What is the cause of that cross hauling, the occasion for it?

A. Because it depends altogether upon the class of timber, the kind of timber, and the market demand in the various lumber manufacturing territories. We have a great many cases where cedar logs are shipped out from the same plant where fir logs are

shipped in; and recently a very considerable business has been built up in the movement of spruce, fir and cedar cants and veneer blocks, which are short lengths of logs, and I understand they take the log rate and they quite largely move in gondola cars, where the tare weight would be very much greater than the tare weight on log cars.

Q. And that is the reason why you cannot apply the ordinary 14 ton weight of the average log car?

A. I think it would be absolutely unfair to do so. Besides that the expense of moving empty cars in trains on a tonnage basis is well known by operating offices to be greater than the movement of the same tons in loads on account of the increased friction of the train, and that would particularly be true in handling logs, where in so many cases it is necessary to handle the empties ascending very heavy grades.

Q. Now referring to this question with regard to attributing to the log traffic some portion of the station service of these Puget Sound terminals, what have you to say as to whether a fair proportion of that expense is attributable to the log traffic, and if so why?

[fol. 413] A. It is just as much work for an agent to bill a car of logs to move 30 miles as it is to bill a car of lumber to move 1,000 miles, and there is in my opinion no reason why the same expense of station employes should not be charged against the log traffic that is charged against any kind of traffic. There are certain items which are chargeable entirely to the log traffic, which expense I understand has been allocated to general traffic, and that is particularly, the log scalers, of whom there are a number on both the Tacoma and Seattle Divisions.

Q. And they are solely for logs?

A. Yes sir.

Q. And that is assignable to station service?

A. Yes sir. Also there is one item, the weighing and inspection pool, which expense is charged to station service, which should not any portion of it be allocated to the log traffic. But, on the contrary, a very heavy proportion of the operation of joint yards and terminals which is charged to station expense should be allocated to the log traffic, because there is a very great deal of switching connected with the handling of log cars.

Q. What other items go to make up that station service, as testified to by Mr. Peterson, as applied to the logs?

A. All of those items, station employes and supplies, weighing and inspection pool, joint yards and terminals, that is all that is charged into the station accounts with the exception of train mileage basis of common expenses, which was explained by the previous witness.

[fol. 414] Q. So as a practical operating man do you know of any reason why logs should be exempted from sharing in this station expense?

A. I do not, I think they should be charged in.

Q. Now with regard to the other items shown on this Exhibit, Northern Pacific's Special 150-C No. 18, which covers the operations

for the entire year. Now your train enginemen and total engine service, that item, you have heard Mr. Peterson's testimony, you understand the theory upon which he has charged those to the log traffic?

A. Yes sir.

Q. Do you know of any reason why that is not a proper charge against the log traffic?

A. I do not.

Q. Is it a proper charge?

A. I think so.

Q. Now the total train service, you heard his testimony as to what those items were, is there any reason why it is not fair to charge to logs its proportion of that?

A. I think it is entirely fair.

Q. On that car mile basis?

A. I think it is giving the log traffic rather the best of it, if anything.

Q. And the total casualties, including damage to stock, and personal injuries, and wrecks, and things of that kind, is there any reason why they should not be charged to logs on the per car mile basis?

A. I don't think so.

Q. And your total miscellaneous, including dispatching, telegraph-
[fol. 415] ing, signalling, crossing protection, drawbridge, etc., is there any reason why that should not be charged to logs on its mileage proportion?

A. I think the log traffic should bear its share of that burden.

Q. And then the total maintenance of equipment account which he has charged to logs in the proportion only that he estimated the total car miles of logs bore to the total traffic, what have you to say as to whether the maintenance of equipment should be apportioned to logs on the basis adopted here?

A. The maintenance of equipment of log flats is very much heavier than the average cost of maintenance of equipment—of other equipment——

Q. So that so far as that item is concerned there is not enough charged to logs, is that your idea?

A. Yes, that is my idea.

Q. In that connection we will have an exhibit showing the actual cost of maintaining logging equipment, as I understand it. Now your total maintenance of way and structures, you heard the testimony and understand how that is charged to the log traffic?

A. Yes sir.

Q. Is there any reason in practical operation why that is not chargeable in the same way?

A. I think that is giving the log traffic the best of it because the log traffic is harder on the track and bridges than almost any other class of traffic we handle.

Q. What is the reason for that?

[fol. 416] A. The reason for that is on account of the very high

center of gravity that cars loaded with logs have, and the rolling motion which they acquire in moving over the track on branch lines, which perhaps are not up to 100% standard, and not ballasted quite as well as main line track, and in my opinion those things would tend quite a good deal to the cost of maintenance of branch lines.

Q. Now the total traffic expense, do you know of any reason why that should not be charged to logs in its proper proportion on the car mile basis?

A. What do you mean by traffic expense?

Q. That is the expense that Mr. Capron spoke of, that kind of expense?

A. No, I don't know of any reason why it should not, although I never heard of any traffic man soliciting any log traffic.

Q. But the total general expense, is there any reason why logs should not share in that?

A. I don't think so.

Q. Now to go back Mr. Albee, are you familiar with the original conditions at the time these log rates were established?

A. I was here and I think I am fairly familiar with the general conditions which existed at that time.

Q. Go ahead and tell us just what it was that influenced these original rates.

A. Bringing it down to the present time as I see the condition——

Q. Yes, go ahead and tell us briefly but fully what it was?

A. When log rates were first established there was very little eastbound business, and the management of the Northern Pacific were [fol. 417] very anxious to develop the lumber traffic to fill the cars which were then moving west loaded and east empty. There were very few lumber and shingle mills and such as were operating were mostly located on tidewater, and therefore it seemed the logical thing to do to aid the lumber traffic and so make log rates as to permit logs to move freely to tidewater to be manufactured into lumber and shingles, which was probably the reason for the train load rates being established, which have continued to some extent to the present day. They were at that time really trainload rates, that is, the traffic moved in traibloads under ideal conditions, the empties moving east up into the timber on ascending grades, and the loads moving west on descending grades.

Q. You had no cross-hauling?

A. No, no cross-hauling, and there was no handling in trains with other traffic. These were log trains pure and simple; and that was the origin of the basis of trains of logs moving in trainloads under trainload rates, when they were really trainloads and no other traffic was handled on those trains. At that time there was no standard method for cost statistics and comparatively little was known of the cost of handling traffic. The log traffic moved as I have outlined and was regular, involving an assignment of a certain number of cars to each shipper for constant use; and at that time the traffic was not nearly so handicapped by labor troubles, market conditions, etc., as it has been since. There were no Interstate Commerce Commission regulations in effect relative to safety appliances, air brakes,

etc. These regulations are becoming more stringent all the time and [fol. 418] they entail a great deal of additional expense in the maintenance of equipment. There was at that time no full crew law. The way that operates in the State of Washington is shown by the fact that on such exclusive log trains as we do run we are obliged, whenever there is over 24 cars and a caboose, to put on a third brakeman on the train, although he renders absolutely no service.

Q. Now is that true as regards all other traffic?

A. That is true as regards other traffic, as far as our having to use the brakeman is concerned, but on other trains he renders some service, but on log trains he can't ride out on top of the logs, and he simply rides in the caboose with the other trainmen; and it has frequently happened on my own division that we would either have to leave logs on account of having over 24 cars or send another brakeman from a distance of over 100 miles to come out on a certain train. I have prepared an Exhibit which I suppose you will present, showing that expense. At this time when these rates were established there was no Adamson law, no time and a half for over time. Bridges, track and equipment were not maintained on as high a standard as now, and in consequence on the Tacoma Division when I was first superintendent the expense was about one-third of what it is now, We have certain branches, such as the Orting Branch, the Green River Branch and the Yacolt Branch, where the logging traffic constitutes the major portion of the freight traffic handled. These branches are usually on heavy grades with extreme curvature, located along mountain streams and subject to damage by washouts, rendering constant expense necessary for protection and repair. When log [fol. 419] rates were first established there were no scale agreements in respect to employes, excepting those in train engine and switching service, and the agreements with them were not nearly as complex and burdensome as at the present time. Logs cannot be handled through double track tunnels such as the Nelson Bennett tunnel under Point Defiance Park. This frequently results in heavy increase in costs of handling logs from points on the main line and the Grays Harbor and Willapa Harbor line destined to Tacoma and Puyallup, and in order to detour it is necessary to handle them over heavy grades, on the Prairie Line through Roy into Tacoma over Pacific Avenue, and numerous other grade crossings, instead of over the low grade line via Point Defiance. That is on account of the hazard of logs falling off in the tunnel and obstructing the main track. It is impossible to handle logs on double track main line during the hours of darkness for the same reason they are not handled through double track tunnels, which is prohibited. It frequently results in having to set them out and handling them on some other train by doubling up the following day. We cannot plan very far in advance for the distribution of cars or train service for handling logs, on account of the irregularity in the operation of logging camps, which frequently are closed down without notice to the railway company, which is caused by labor conditions, weather conditions, fires, moving camps, etc. This sometimes results in an accumulation of

empty cars in one locality, and then when the camp closes down we have to move the empty cars to some long distance to some other location where they can be loaded. Market conditions to a large extent control in causing the irregularity in shipments, many of [fol. 420] the mills finding it to their convenience to ship logs instead of lumber, or perhaps as I have stated, ship cedar or spruce logs when at the same time they are manufacturing fir. Also there are a great many cases of farmers and other land owners having a small amount of timber on their land, cutting same and shipping it in lots of one or two cars of logs to markets where such logs may be disposed of to the best advantage. Also when mills are destroyed by fire (as has been the case in several locations during the past three years) instead of rebuilding the mill the timber is shipped out as logs, or at least this is done during the period the mill is being rebuilt. When shipments of logs first commenced they were, as I have explained, handled entirely in exclusive log trains; now nearly two-thirds of the logs are handled in trains with other commodities, and about one-third of these shipments are made to interior mills with very limited facilities for handling and unloading cars, frequently having to unload on the same track where the loading of lumber is handled, necessitating a great deal of extra switching in order to set the cars of logs where they may be unloaded. The interior mills were originally located close to their supply of timbers, and therefore they didn't ship logs in or out, but of late years conditions have changed, so that mills such as the McCormick Lumber Company; McCormick Union Lumber Company; Union Mills, Martin Lumber Company, Centralia; Chehalis Lumber Company, Chehalis, Napavine Lumber Company, Napavine, and many others, are shipping in their logs, having cut of the timber contiguous to their mills. Referring further to the matter of track maintenance caused by log traffic: On branch lines with sharp curves there is excessive rail wear [fol. 421] due to the impracticability of elevating the track on curves in such a way that descending trains will ride properly without at the same time having the curvature too great for the best handling of slow moving or ascending trains. On certain branch lines such as the Green River Branch, where the traffic is almost altogether logs, this results in excessive maintenance expense. Seven miles of this particular branch has recently been relaid with 90 lb. rails at very heavy expense, which is to take care of the log traffic and handle it safely. This particular branch is also in the Cedar River water shed where the water is derived for the City of Seattle, and there are numerous protests, and whenever we send a crew in there we have to provide them with sanitary facilities of the most elaborate kind, and the sanitary regulations are so burdensome that the men won't stay there; they cannot fish, they cannot bathe, they can't do anything only stay on the railroad, and the consequence is that our turn over there is about 100% of what it is anywhere else. And the expense of providing these facilities to take care of the regulations of the City of Seattle very materially increases our expense, almost all of which is chargeable to the log traffic. The figures which have been submitted in one of the exhibits showing the number of cars required

to produce one load, approximately four, apply only during the period when the camps are actually operating. It should be taken into consideration that there may be and there usually are periods of considerable duration each year when the camps are closed and a large number of men idle. That is true at this particular time. Also [fol. 422] these cars are not available for other service on account of their being especially fitted up for the logging service. I have spoken of the increased expense of maintaining log flat equipment as compared to other equipment——

Q. Now in that connection, as I understand it when these rates were made and conditions were such as you have described them and which in later years have undergone this change, that has been without any corresponding raise in the log rates, except the general advance that would apply to all the traffic?

A. I understand that is true.

Q. So that the rates we now have are practically the rates originally fixed years ago?

A. Based on the old conditions, yes.

Q. And without any allowance whatever for the change in conditions which you have been detailing?

A. Yes. There are something like 30 logging roads connecting with the Northern Pacific track on my division, to which road delivery is made of empty log flats, and they take the log flats out on the logging roads and load them and return them to us. These logging roads usually are located on heavy grades ranging from 3% to 10%, and to control logging trains descending such grades air brakes and hand brakes are frequently applied, sometimes by men not entirely familiar with the working of the brakes. This excessive braking frequently results in the sliding of the wheels, necessitating the removal of the wheels at terminals. On such logging roads there are a great many places where there is close clearance, resulting in the binding or breaking of brake staffs, hand holds, sill steps, etc. Also cars are quite frequently damaged by the cables [fol. 423] used in pulling the logs to the cars. In dumping logs there is usually a good deal of delay on account of the majority of the log dumps being so located that the logs can be unloaded to advantage only when the tide is such that the logs may be floated, and in many cases they cannot be unloaded at all at low tide, which renders increased switching expense necessary in order to meet the necessity of having the cars on the dump at such time as the tide is such that they can be floated; and, as most of the log dumps are not sufficient in length to set in a full day's loading of logs, it is necessary to have a switch engine remain with the cars to set in others when already set in have been unloaded. We have had several instances of cars being turned over into the water while logs were being unloaded. When sills are broken on cars—those are the longitudinal or cross timbers under the cars which constitute the framework for the car, it is necessary to send the cars to South Tacoma to the shops there, empty, for repairs, and, the repairs having been completed, to return the cars empty to the loading point, which accounts for a great deal

of the empty haul. This caused by the fact that we haven't facilities at outlying points, out on the road, to make heavy repairs to cars. Approximately three-fourths of the cars used in the logging service are equipped with patent bunks, what are known as patent bunks. There are several varieties of those and those used on the Northern Pacific are mostly of the variety known as the Rainier bunk and the Turtle Back bunk, but we have approximately 150 cars equipped with another class of bunk known as the Seattle Car Company bunk and these particular bunks are owned by the Clark County [fol. 424] Timber Company operating north of Yacolt in Clark County, and they require those particular cars. When they close down their logging operations, about twice every year, it is necessary, in order to avoid holding those cars idle for several months, to remove the bunks from the cars and pile them up at Yacolt until such time as they want those cars or other empty cars back so they can resume their operations; which, of course, involves additional empty haul. Also the fact that a portion, as I have stated approximately 25% of the cars in the logging service are not equipped with patent bunks, renders it necessary to move the patent bunks around, frequently empty, in order to keep them busy as far as possible, in preference to the wooden bunks; and the fact that this 25% of the cars are equipped with wooden bunks makes our supply of log flats somewhat elastic. For instance if there should be a heavy demand for cars to load with lumber and the demand for cars to load with logs should be somewhat slack, we would remove the common wooden bunk from this 25% of the cars and put them in the lumber traffic and continue the cars equipped with the metal bunks in the log traffic. It is absolutely necessary to have a certain elasticity about these in order to avoid keeping an unnecessary large number of cars idle all the time prepared to handle the log traffic when the conditions are such that the cars were needed. That is all that occurs to me other than in regard to these exhibits which you have that I can explain later.

Q. Now what have you to say as to the desirability of trainload rates from the transportation standpoint under present conditions, as the operation actually occurs?

[fol. 425] A. I have stated that when those trainload rates were established they were equitable from the shipper's standpoint and economical from an operating standpoint, because there were only three or four large shippers affected who actually did furnish the traffic to be handled by the railroads in trainload lots. But, owing to changed conditions under which a very large proportion of our traffic is handled, in trains with other commodities, I think that this practice of having a tariff on logs in trainloads, works out to the disadvantage of a large majority of the shippers and increases the expense to the railroads of handling the traffic, for the following advantage of the trainload rate very frequently have to hold the logs in trainload lots. A large majority of the shippers in order to take advantage of the trainload rate very frequently have to hold the logs over from one day to another in order to accumulate a sufficient

number of loads to take the trainload rate, and this has resulted that in actual operation a great many times during times of car shortage in delay to cars, either because the shipper wouldn't bring the cars down to the interchange point until he had accumulated his trainload number, or because he wouldn't tender the billing until he had a sufficient number of cars, and in consequence our trains would pass these logs—maybe there were 10 or 12 cars if he had a 15 car rate, or 8 or 9 cars if he had a 10 car rate, and in consequence we would run to the terminal light and the next day would be overloaded and perhaps they would have more than their tonnage and again have to leave some of the cars of logs. That is particularly [fol. 426] vicious and undesirable on branch lines where in some cases we have tri-weekly services. It results in delay to equipment, inefficient operation and discrimination.

Q. As a matter of fact is 8 or 10 cars a trainload?

A. 10 cars is not a trainload and we never run an exclusive log train for as low a number of cars as 10 loads.

Q. Now how many cars of logs ought it to apply to if it is to be a trainload rate from any real traffic standpoint?

A. At least 30.

Q. Would that be true on all of the operations or in some cases could you handle as many?

A. That would be true on all the operations.

Q. You can handle 30 cars in a load at any point on any of your operations?

A. To justify a trainload rate——

Q. I say could you handle, actually handle or move that many on any run?

A. Yes we do.

Q. And it would result then in how many you could move under favorable operations?

A. Up to 50.

Q. Do you see any advantage or excuse or any reason, from the carrier's standpoint, of carrying the lower trainload rate for a less number of cars than 30?

A. I do not.

Q. Now as a matter of fact is the trainload rate so abused and manipulated that the carrier has transported even less than 10 cars for the 10 car rate?

[fol. 427] A. The tariff provides that if during times of car shortage the railroad is unable to furnish the number of cars to make a trainload, and if the shipper places an order for the necessary number of cars, and owing to the disability of the carrier he is not furnished with that number of cars, that the trainload rate will apply on such number of cars as he is able to ship.

Q. Now as a matter of fact, shippers knowing the carrier is unable to furnish cars will demand the full amount?

A. Yes, and I think they have done that a great number of times when they couldn't possibly ship under the trainload rate.

Q. Didn't have the cars——

A. Didn't have the capacity to ship.

Q. Didn't have the loads?

A. No sir, didn't work enough sides.

Q. And in that way they get the trainload rate which they are not entitled to under the circumstances?

A. I think so.

Q. Furthermore, in regard to your car distribution movement, in times of shortage you have to furnish that shipper his proportion?

A. Yes sir.

Q. Now will they get the trainload rate by demanding more cars than they are entitled to under the rule, is that a possibility?

A. Yes.

Q. And do you know whether that tariff is evaded in that way? [fol. 428] A. We have checked up some cases where it seemed to us it was.

Q. At least there is that opportunity?

A. Yes, there is that opportunity.

Q. Now how has it discriminated against the large logger who is running a heavy operation, and the man who is running a smaller plant?

A. The man who is running the smaller plant and ships his logs at the convenience of the carrier in such trains as are run, is discriminated against by being charged more, a higher rate in proportion, on his shipments, than the logger who is prepared to ship his logs in larger quantity and is probably located at the end of a branch, where the track for perhaps 8 or 10 miles is maintained almost solely and under very expensive conditions for the purpose of handling his shipments. He gets a lower rate than the man who is located perhaps in less expensive territory and holds his logs at the carrier's convenience.

Q. I believe the difference is 10% in favor of the trainload rate over the carload rate?

A. You mean the tariff?

Q. Yes.

A. I don't recall that.

Q. Now to what extent are the operations now conducted such as enables the operator to use the trainload rates. I mean what percentage of the operators are large enough to avail themselves of trainload rates?

A. We have on the Tacoma Division, or did have, when logs were being shipped freely, in 1920, approximately 45 various log shippers in greater or less quantities. Of those 45 log shippers there were [fol. 429] approximately three or four who were prepared to at all times take advantage of the trainload rates on logs, although there were quite a good many more who could occasionally do so.

Q. Could you give an approximation of the percentage of the log traffic that moves under these trainload rates as compared with that that takes the carload rates?

A. I don't have those figures, I couldn't say.

Q. You have shown that about 65% of the logs moved in trains with other commodities, did you not?

A. I think you have an exhibit which shows something of that purport.

Q. And didn't you say that the other 35% were shipping under trainload rates—and 65% under carload rates?

A. That wasn't what I meant. I meant in exclusive log trains.

Q. I know you meant that, but do those logs which move in trains with other freight generally take the trainload or the carload rate?

A. There are quite a great many of them that take the trainload rate of 10 cars or more.

Q. Would you say that 50% of the logs can be shipped under trainload rates?

A. Well I think that would probably be approximately correct.

Q. So that there is some discrimination then, as you see it against a very large proportion of the shippers and as applied to a very large proportion of the actual shipments?

A. Of the shippers but not of the shipments.

Q. I see, you say the discrimination against the shippers is much greater than it is against the shipments?

[fol. 430] A. Yes.

Q. Now you have to keep in touch, I take it, with the results of operation on your division at all times?

A. Yes.

Q. You get the statistics furnished by the accountants monthly, do you not?

A. Yes.

Q. Now what would you say, from an operating standpoint, as to whether or not the log traffic on your division costs more than the average of all of the traffic which you handle?

A. I would say that the expense of handling the log traffic was greater than the average carload traffic which is handled, for reasons some of which I have outlined.

Q. Now is there any possibility but that the log traffic does cost more than the average carload traffic——

A. Than the average carload traffic?

Q. Yes?

A. I think it does.

Q. Explain some of your reasons for reaching that conclusion?

A. Because the log traffic is the only traffic where our equipment is delivered to other lines and handled under logging road conditions, conditions which are necessarily very much more severe on the equipment than those which the cars encounter on our own lines. It is true that cars could be loaded with lumber also to be delivered to other lines, but the conditions under which cars are handled to load lumber are nowhere near as severe as where they are used to load logs.

Q. Now what about the abuse of equipment and the damage to it in the log traffic, as compared with other traffic?

[fol. 431] A. The abuse of equipment is very great, very largely owing to circumstances which are not under the control of the log shippers. They necessarily construct their roads in the best manner

they can, with very heavy grades and very heavy curvature to develop their timber in this mountainous country and I don't doubt that they endeavor to handle the cars as carefully as they can under those circumstances. We realize that this is true and therefore don't attempt to claim from the log shippers for damage to equipment unless we are satisfied that the damage was caused by abuse of equipment or something which is not chargeable to ordinary wear and tear. Therefore, as a rule, before rendering a bill against the shipper for damage to equipment, we write them and request that they investigate in regards to the particular cars which have been reported to us as damaged and advise as to their acceptance of bills to cover the cost of repairs.

Q. Well now these logs are hoisted on the cars are they not, by tackle of some kind?

A. The method of loading and handling logs in the timber have been changed in recent years as I understand it, by introducing what is known as "The high lead". As a rule skid roads are no longer constructed but the logs are pulled through the timber with what is sometimes known as a "Flying Machine" and I think that sometimes when they reach the landing they are skidded on to the car in the old-fashioned way, and sometimes they are lifted with the lead and dropped on to the car. In every case an effort is made, of course, to avoid damage to the car, but owing to the severe conditions under which it is handled, and the more or less inexperienced class [fol. 432] of men which they sometimes have to use, the fact remains that this class of traffic is very hard on the cars.

Q. So that the damage to the loaded car mile, in proportion to the revenue, or any other basis which you might select, is higher on logging equipment than on other equipment?

A. I think it is, and all our experience indicates that. Not so much owing to the actual damage itself, that is, the expense of actual repairs to the cars, but owing to the incidental expense; Sometimes in having to haul a car 150 miles in order to get it to a repair point, and then haul it back again empty; and also owing to the tremendous switching cost in the terminals. It costs just as much to, switch a car to a repair track to have a hand hold or sill step—that perhaps co-ts one dollar—and then switch it back again, as it does to switch it there to have a sill repaired. And not only is that true as far as the car itself is concerned, but the expense is very greatly increased owing to the fact that any bad order car on a railroad system is just like a sore hand or a sore member of any kind in a man's body, it is always getting in the way of the other member; and that is the way it is with a bad order car, it is an expense from the time it is made bad order until it is repaired.

Mr. da Ponte: I wanted to ask the witness about some exhibits. I have them all ready but couldn't get them here today but will have them here tomorrow, and I might examine him about these exhibits and give them a number, and I will have the rest of them here tomorrow morning so as to distribute them around.

[fol. 433] Mr. Henderson: Are they such exhibits as we will have to have testimony on?

Mr. da Ponte: I will give you an example. I call your attention to this Exhibit, being Northern Pacific's Exhibit No. 25, and ask you to explain what that is?

A. This is a statement of the Tacoma Division, of the number of cars of logs loaded on this division each month in 1920. It shows a total of 66,698 cars, or a monthly average of 5,558 cars. It shows the average number of log flats on the division, including bad order, which, as per an inventory attached, taken in March, 1920, was 950 cars, and in September 1920 was 905 cars, an average for the year of 927 cars.

Mr. Carey: Is that 927 flats assigned to the log service for your division?

A. Yes, that is the average for the year 1920. The average number of cars required to produce one load was found by dividing the average daily loading, which was 214 cars, into the total cars in service, as shown by the inventory for the year, which was 4.3 cars.

Mr. da Ponte: In other words the Company had to maintain on hand 4.3 cars for each loaded car it got?

A. Yes sir, and it shows the average number of log flats in bad order was 107, and the percentage of cars in bad order to the total number, found by dividing 927 into 107, which is approximately 12%.

Q. In other words 12% of the log cars were bad order?

A. Well, I will explain a little in regards to that: The report is taken once each day, not at the same hour at all the various points, [fol. 434] but we begin to get the reports in by telegraph early in the morning, 9 or 10 o'clock, and they continue to come in as rapidly as the agent can prepare them and get them ready, until it is complete, about two or three o'clock in the afternoon; and it can readily be seen that that involves a car being in bad order in the morning when the report was taken, it may be repaired and perhaps another car set on the repair track and also repaired, and both may be all right for loading, and therefore this figure here, 12%, is very much less than the actual figures for bad order cars, for the reason that during times of car shortage we switch the repair track frequently, to at least three times per day, so that cars undergoing light repairs would probably not appear in this report at all. And I have already explained that the large cost of repairing the cars is not found in the actual figures showing the expense of making the repairs, but in the cost of handling the cars to and from the repair points, including the repair track at the terminals; and also—which I didn't explain, the expense of having the cars out of service.

Q. Well, now, what percentage of other cars were on the repair track?

A. I think you have another exhibit covering that.

Q. I will show you another exhibit, which we will mark Northern Pacific's No. 26, and ask you to state what that is?

A. This statement shows the data on repairs to log cars at the

South Tacoma shops, during the month of September, 1920, allocated to log flats and other open cars; that is, flat cars and gondolas, everything except closed cars, box cars, refrigerator cars, stock cars, [fol. 435] etc. It shows first the number of log flats having broken sills renewed, which is 80; the number of broken sills renewed in such cars was 187; the number of open cars other than log flats having broken sills renewed 84, as compared to 80 for log flats. The number of sills renewed in such cars was 207, as compared with 187 in log cars. Percentage of log flats having broken sills renewed to total number of open cars upon which sills were renewed was 49%. The percentage of sills renewed on log flats to total number of sills renewed was 47%. The number of log flats upon which heavy repairs were made, including sills, was 60. The number of other open cars upon which heavy repairs were made, including sills, was 87. Percentage of log flats having heavy repairs to total number of cars having heavy repairs was 47.7%. The average cost of repairs, per car, to log flats was $22.97. The average cost of repairs to cars other than log flats was $24.95. Percentage cost per car log flats compared with other open equipment was 92%. Now in order to make this statement of any value in extending the cost of repairs to log flats as compared to other open equipment, I will have to go into some detailed explanation. The South Tacoma shops is the repair point for handling heavy repairs and rebuilding the cars for the entire Western District, at least from Missoula west, and all cars which start west from eastern terminals on transcontinental traffic, are kept going as fast as possible until the- reach the Coast. The reason for that is very evident, that it is undesirable to set loaded cars out short of destination to make repairs, and they necessarily are repaired en route only to such extent as required to enable them to be handled with safety to the Coast. And in regard to empty cars I have sometimes thought that the self-interest of some of the inter- [fol. 436] mediate superintendents entered into it—that they pushed the cars on to me until they all got to the Coast and had to be fixed up, and consequently South Tacoma is the point where cars are assembled from 1,000 miles east, for repair; whereas log flats are used only on the Tacoma and Seattle divisions; and the mere fact that approximately as many log flats had sills renewed as coal cars and flat cars and all other open cars in this month, would indicate to me that the log traffic was very much heavier, so very much more severe on the equipment than other open car traffic.

Q. Of course there is no way of telling, I take it, just what percentage of the log cars were in the repair shops to the total number of cars in service, because of the reasons you have detailed, that the other equipment comes in from 1,000 miles of railroad and the log cars are only off from this division of yours.

A. No, I couldn't give that proportion.

Q. That wouldn't be possible, would it?

A. No. There are a large number of my exhibits which are not here (referring to papers).

Q. Well, there is a copy of each one in there, isn't there?

A. No, I don't see them——

Q. Now Mr. Albee do you have occasion to pick up logs which escape from the cars and fall off the right of way in transit?

A. Yes, we pick them up once a year.

Q. Does that have to be done?

A. Yes, because very frequently they fall off in cuts and places [fol. 437] where they obstruct the drainage. They are very unsightly, and besides that if we didn't pick them up the shippers would make claim for the value of the logs.

Q. Now I show you a statement marked Northern Pacific's Exhibit No. 27, and ask you to explain what that is Mr. Albee?

The Director: Have you copies of those Mr. da Ponte?

Mr. da Ponte: Yes.

The Director: Will you have 20 copies?

Mr. da Ponte: Yes we have 25 copies but I didn't think we would need them today.

The Director: I mean will you have them here?

Mr. da Ponte: Yes, I will bring them down tomorrow morning.

The Director: I think you had better delay asking him in regard to those exhibits until we get the copies, so that the parties can follow them.

Mr. da Ponte: Now there has been something said by Mr. Peterson concerning the cost of operation of short hauls as compared with long hauls, it appearing here that the average movement of the log traffic is about 32 miles of average haul as compared with 142 miles, I believe, for traffic generally in transit in Washington, I wish you would explain why the log traffic costs a greater proportion of the gross receipts than the general run of the traffic?

A. You mean explain as to the reason for the long haul and give you an illustration of the short haul traffic?

Q. Yes, that is, that the net receipts to the carrier from the long haul traffic is much greater than the net receipts from the short haul traffic?

[fol. 438] A. Of course that depends a great deal upon the basis which you use for your expenses. The operation of an originating and terminal division, such as the Tacoma Division, and to a somewhat less extent the Seattle Division, is very much greater than the expense of a through division, where the tonnage is very largely handled in at one terminal and out at the other. That is for the reason that it is necessary to maintain a very much more expensive organization on a local division of that kind; the operation being to some extent comparable to a yard it is not possible to so assign the train and engine crews that they can, except in rare instances, accomplish their work inside of eight hours. They are paid time and a half for over time. This is caused by a good many different conditions, but largely due to the fact that we have to take into consideration the providing of places where they can eat and sleep, and it is obviously out of the question to tie them up between terminals where there are no accommodations to be comfortable, and owing to this fact a large proportion of the train and engine crews are on an over time basis.

Q. Well now you have in mind this situation, that a certain proportion of all operating expenses are what is known as fixed, which don't vary with the length of the haul?

A. Yes, I am coming to that.

Q. That is what I wanted particularly explained.

A. Quite a large proportion of the expenses on a division of this kind are fixed. It is necessary to furnish a certain amount of service regardless of the amount of business offering. It is necessary to [fol. 439] have an agent and frequently an operator, and sometimes a clerk. This is particularly due to the eight hour regulations now in effect; where the spread of hours will be such necessarily that we have to employ two men when one man could do the work by working 10 or 12 hours. And it is impossible on a division of this kind to reduce the expense to accord with the traffic handled. There are fixed expenses, such as agents, telegraph service, freight service, and a certain minimum amount of train service which it is impossible to reduce, can be done on a division where the conditions are different.

Q. Now the average haul of all freight on your division are you able to state that?

A. Not unless it is shown in some of these exhibits.

Q. Well, we have that and can figure that out and will do so, but is it true that the proportion of your gross receipts from the short haul traffic consumed by this expense or these expenses, is greater than the proportion of gross receipts from your long haul traffic?

A. Well, of course that would be an accounting problem, as to which proportion of the receipts would be allocated to the long haul traffic and which to the short haul traffic, but it is a fact, as I have just stated, that the expenses on any basis you may use, the car mile basis or the gross or net ton mile basis, is greater for the short haul switching traffic that it is for the long haul traffic. One reason for that has been stated by Mr. Calderhead, as due to the fact that the short haul traffic has two terminals.

[fol. 440] Q. So that on these exhibits—this Northern Pacific Exhibit No. 18 (Special 150-C) which shows the average expense per estimated loaded car mile for 1920, is it true or not that because of the shortness of the log haul as compared with the other traffic, that the expense given here of 37.91 cents, which is the average expense for all business, would be considerably greater as applied to the log traffic?

A. Yes, I think so, because as I understand it the total expense includes interstate traffic long haul business as well as the short haul business, and the logs are all short haul business.

Q. And for that additional reason the expense of the log traffic is in excess of all the traffic on this division?

A. I think so.

Q. Can there be any question about that?

A. I don't think so.

Q. Now something was said with regards to the extra expense on the Seattle Division on account of the grades over the Cascade Mountains. I will ask you to state how the expense on the Tacoma Division would be affected by the grades, and how the grades on that Divi-

sion compare with the grades on the Seattle Division, and the expense from that source, for instance your branch line grades and the grades up the hill out of Tacoma, and the other conditions?

A. Well we have no mountain grades such as the grades over the Cascade Mountains. We have a great many grades where either helper service is necessitated or a doubling of the hills, and this is quite largely due to the log traffic. That is not true however of the [fol. 441] grade there to South Tacoma, where logs are not moved ascending; they are descending.

Q. But you push your empties up there for repairs at the shops?

A. Yes, and a portion of that of course would be chargeable to the log traffic.

Q. And that is just as high a grade as there is on the Cascade Mountains?

A. Approximately so. But on trains moving east we very frequently have to provide a pusher from Centralia to Rainier, over a 1% grade ascending into Rainier, due to moving logs over that line.

Q. Now it appears here that at least 75% of these car miles on your division were made on branch lines; how do the grades of these branch lines and the consequent cost, compare with the Seattle Division including the Cascades?

A. I am not entirely familiar with the grades on the branch lines on the Seattle Division——

Q. On your Division?

A. On my Division the districts where the logs mostly move are districts of very heavy grades. For instance on the Willapa Harbor line, which is commonly known as the South Bend Branch, logs move both ways ascending, with the very heavy grade of 1.8%. On the South Bend line it is frequently necessary, on account of the log traffic, to afford helper service, or to double into what is known as Pluvius.

Q. Now Mr. Albee have you ever compared the expense on the [fol. 442] Seattle Division, per 1,000 gross ton miles, with that on the Tacoma Division, the two divisions?

A. Yes, it shows quite a large increase for the Tacoma division as compared with the Seattle Division, and the reason for that is, that they have a heavy tonnage long haul movement from Auburn to Ellensburg, which, credited to their train haul tonnage gives them a great advantage over the Tacoma Division, while we have almost no full tonnage movement. Our trains are mostly either on the service basis or—yes, mostly all on the service basis; that is, we have to furnish so much train service to handle the business regardless of the business offered.

Q. So that your costs on the Tacoma Division per 1,000 gross ton miles are in excess of that on the Seattle Division?

A. Yes.

Q. That was brought out by Mr. Calderhead's statement a while ago, that we were charging logs with part of the extra cost which was necessitated by the expensive operation over the Cascades. Now I call your attention to a statement showing the expenses per 1,000 gross ton miles for September, October and November, 1920, on the

Seattle and Tacoma Divisions, which shows on the Seattle Division an expense of 4.61 and on the Tacoma Division an expense of 5.93, is that correct?

A. That is correct, and due to the longer hauls which the Seattle Division has than the Tacoma Division.

Q. So that it is not cheaper to handle business on your division than on the Seattle Division?

A. No sir.

The Director: We will adjourn until 9.30, and we will have to meet tomorrow in the Chamber of Commerce on Main Street. We thought we had this room engaged for tomorrow as well as today but received orders today to turn this room over to the License Department for some sort of an examination.

Mr. Carey: If the Commission please I have three witnesses whose testimony will take probably in the aggregate an hour and a quarter or an hour and a half. I brought them down here expecting to get through with them——

[fol. 443] The hearing was resumed as per adjournment at 9:30 a. m. Tuesday, June 28, 1921, by continuation of direct examination of Mr. Albee.

By Mr. da Ponte:

Q. I show you an exhibit which will mark N. P. Ex. 27, and I will ask you to state what that is.

A. This exhibit is a statement showing cars handled through terminals for the month of March, 1921, and cars set on repair track for the same period, each car counted once. These terminals include Tacoma, Centralia and Hoquiam. The object in introducing this exhibit is for the purpose of showing the percentage of cars in general which it is necessary to place on repair track, and the percentage of log flats which it is also necessary to place on repair track, and this shows for these three terminals where cars are repaired, that the percentage of cars set on repair track is as follows: Log cars, 33%; other cars 6.3 per cent.

The exhibit, I think, bears out my testimony that the car which are reported each day as being in bad order by no means includes all the cars actually placed on repair track for the reason that we endeavor to switch the repair tracks two or three times a day and sometimes oftener in order to avoid holding cars out of service an unnecessary length of time and therefore that while it shows 33% of logging flats on repair track, that simply indicates most of them required minor repairs which it was necessary should be done before cars could go forward — most probably penalty defects.

Q. This shows cars moving through terminals likewise. Do you mean by that only bad order cars moving through terminals?

A. No, I mean that of the cars moving through Tacoma during this period, there were 2204 log flats, other cars 9920, and a total of 12,124; that of the total which moved through terminals during

that month 2204 were log flats. 30.8 per cent of lop flats handled were put on the repair track.

[fol. 444] Q. Of course the number of log flats as compared to the total cars is negligible is it not?

A. Very small. It is just exactly what it says; that the percentage of cars set on repair track to the total cars handled was 30.8 and cars other than log flats had a percentage of 7.1.

Q. Was this representative of the repair to log equipment?

A. The burden which the cost of switching and repair of cars bears to the total number of cars handled during that month.

Q. Showing how large it is on log cars for that item?

A. Yes, sir.

By Supervisor Cleland: What is the practice, Mr. Albee, at other points, take Hoquiam for instance, where you do not have any repair track?

A. We handle them to Centralia and repair them there, which is the reason for the number of cars being repaired—so great at these repairing points.

Q. At other points it might be only seven or eight per cent?

By Supervisor Cleland: Then do your other points—these are your through points where you actually repair cars, and you send them all in there to de repaired, which would increase your percentage materially?

A. That is true.

By Mr. da Ponte:

You send logging flats as well as other cars—they all come to the same place for repairs?

A. That is right; the figure would not apply to any place where we do not repair.

Q. These figures show repairs to cars generally as compared with logging cars?

A. Yes, sir.

[fol. 445] By Supervisor Cleland: You handle other equipment in greater number than logging cars. Your statement could not be exactly fair, then, would it? You maybe have in Tacoma to handle thousands of other cars, but you send all your logging cars there to be repaired, which would show a percentage very large in comparison with the number of cars.

A. The statements show that, the expense of the terminal, switching and repairs of cars is added to by all the repairs sent there to this point.

Q. It is true of repairs to all cars as well as log cars?

A. Yes, sir.

By Mr. da Ponte: I think Mr. Cleland is confusing the number of cars moving through terminals and not repaired, which this does not mean to show. This means as compared with other cars, and in proportion of cars handled through terminals, which is covered by N. P. Exhibit 27,—do you have repair sho s for other cars in Seattle and elsewhere?

A. Yes, sir. I did not obtain those figures because they are not on my own Division.

By Supervisor Cleland: I have in mind, did you send all of the cars from all Divisions, to Tacoma to be repaired, and that would increase your number of cars to be repaired?

By Mr. da Ponte: On all cars same as on logging cars; we have no particular point to repair logging cars.

Q. You state all major repairs to logging cars were made in Tacoma?

A. I think I see what you are getting at. One exhibit put in yesterday showed heavy repairs made to logging cars and other open cars at South Tacoma; this statement, exhibit N. P. 27, does not include South Tacoma; it simply includes the running repairs made in Tacoma yards, not including heavy repairs made at South Tacoma. Therefore repairs at Tacoma only include running repairs incident to traffic centering at Tacoma.

[fol. 446] By Supervisor Cleland: That is what I had in mind.

By Mr. Henderson: I think his impression is correct that there is something wrong with the exhibit.

By Mr. da Ponte: It shows the percentage of logging cars as shown on the exhibit as comparted with all other cars at the same point. I do not think there is anything whatever wrong with it.

By the Director:

I would like to ask how does the number of log flats handled in your division compare with the total number of cars handled?

A. The number of log flats in constant service on the Tacoma division is approximately 900 and the total number of cars at present time on the Tacoma division is something over 5,000; but, conditions at the present time are abnormal on account of depreciation in business, and a very large number of empty cars which are stored.

By the Director:

Q. I mean the number of cars in use and handled to about the extent that log flats are handled?

A. Based on loads, the cars of logs loaded on my division as compared with the total loading runs about thirty per cent.

By Mr. da Ponte:

Q. Figuring the percentage of loaded cars, it does not take account of those coming from the East and South and being unloaded?

A. It counts every loaded car that was handled. Are you referring to Exhibit No. 28?

Q. No, the proportion of logging cars and other cars.

A. I was simply referring—there are various ways of figuring the basis of business handled—either on basis of the cars handled or the cars loaded, or both cars loaded and unloaded, and replying to Mr. Kuykendall, I was simply referring to carsloads originating on my division.

Q. Would that show the correct number of log cars on your division as compared with the total number of cars?

A. Not necessarily, because it takes more cars loaded with logs [fol. 447] than of other traffic.

Q. Do we understand it takes 4.3 cars to make a load?

A. Yes, sir.

Q. Would you say on that basis there are 36 to 38 hundred logging cars in your division?

A. No, because we only allowed about two hundred cars per day.

By Mr. Spinner: Didn't you say you had about 900 log cars and 5,000 other cars?

A. At the present time, I said. Last year we were short of cars; we had including these 900 log flats, only a little over two thousand cars on the division.

Q. Was that the abnormal or car shortage period?

A. Yes, sir.

Q. Ordinarily how many would you have?

A. About three thousand.

Q. As compared with 900 log cars?

A. Yes, sir.

Q. I will show you a statement which we will mark N. P. Exhibit 28, and ask you to explain what that is?

A. This is a statement showing the proportion of cars of logs to other loaded cars handled through terminals on Tacoma division during the months of September, 1920, each loaded car counted once.

Q. That is a month of very heavy movement, is it?

A. Yes, sir.

Q. So you would have a large quantity of all kinds of freight coming in through that month?

A. That month was selected because I thought it represented a normal month of fairly heavy traffic.

Q. What percentage of log cars moved through Tacoma, Hoquiam, and Centralia terminals?

A. The Tacoma percentage of cars of logs to other total number of cars was 17.73 per cent; and at Hoquiam where the logs form a [fol. 448] very large percentage of the total number of cars handled, it being a central point for shipping logs, the percentage was 41.62; the reason for that is the logs are handled into Hoquiam not only by the Northern Pacific, but by the O.-W. RR. & N. Co., and the Milwaukee, Hoquiam being the joint terminal of all three organizations, the Northern Pacific being the operating company.

Q. How does that bear upon the proposition that the logging cars are charged with terminal expenses discussed yesterday?

A. The reason for the preparation of this exhibit was for the purpose of showing the fact that the logging business is largely chargeable with quite a large proportion of heavy terminal expense.

Q. You have testified concerning the cost of picking up log flats. I will show you a statement which we will mark N. P. Ex. 29, and I will ask you to state what that is?

A. Logs are loaded on cars in pyramid shape and not secured in any way excepting with stakes and blocking to prevent logs rolling, as far as it is practicable to do so. In spite of this method of securing the logs, they do roll off the cars very frequently; this exhibit is prepared for the purpose of showing the number of logs which were picked up during the years shown, and the cost of picking them up. It is customary to go around with work train and bridge crew and derrick about once every year, and pick up scattered logs which have fallen off the cars on various portions of the division, and this exhibit shows that during 1920 on our annual pick-up we picked up 497 logs, and during the year 1921 we picked up 645 logs. These logs are billed in to the owners as far as we are able to ascertain. It will occasionally happen that in a very few cases the logs will not bear identifying marks to indicate to whom they belong, but as a rule each shipper has his own brand, and logs are shipped in to their various owners from the place where they are picked up, and they are billed in at the tariff rate. There may be a few exceptions in which the logs have been scaled and the owner of the logs paid the [fol. 449] minimum rate in which few cases. The freight would apply on a double basis on these logs but where an entire car of logs rolls off there has been no charges collected. In figuring the net loss on picking up logs I have estimated that for all of the business of picking up logs the Northern Pacific derived a revenue of an average of two dollars for billing them in as I have outlined, and I have figured the actual cost under Interstate Commerce accounting methods which we are obliged to use for picking up these logs.

It will be noted that the cost of picking up logs here for the year 1920 was $13.29, and for the year 1921 was $5.98. The reason for the discrepancy is owing to the fact that prior to the year 1921 the Northern Pacific purchased the most modern device, known as a locomotive crane combination and a steam pile driver which was fast enough and of enough additional relief to us in picking up logs so that we more than cut the cost in two by using this very modern device, which has only been in use by railroads in recent years, so that we were able to reduce cost, and even with that we suffer loss in amount of upwards of four dollars per housand on every thousand feet of logs picked up. The average loss of logs picked up for two years is $6.55.

Q. What did that device cost?

A. I can not tell you that. It will be several thousand dollars, but I do not know how much. I recently made a record showing use of it with the view of justifying the purchasing of other devices of similar kind.

Q. Of course that is another expense that is not chargeable to through traffic.

A. The cost of picking up logs?

Q. Yes, sir, and similar to that.

A. We would use the device for other work besides picking up logs.

[fol. 450] Q. But you do not have all of the expense in through traffic?

A. No.

Cross-examination.

By Mr. Carey:

I notice in 1920 the total logs picked up were 426,000 and in 1921 774,000. The log traffic was heavier in 1920 than in 1921, was it not?

A. This don't indicate the years in which we lost the logs.

Q. You pick them up once a year?

A. Yes, sir.

Q. So that figure indicates the number of logs that rolled off during the preceding twelve months?

A. Yes, we pick them up about April, 1920, and about April, 1921, so the logs picked up this year were mostly lost in 1920.

Q. The log traffic for the twelve months preceding April, 1920, was heavier than the log traffic for twelve months preceding April, 1921?

A. I think the figures in some of the exhibits would show that, but I would say it was about the same, from memory.

Q. How do you account for the fact that the number of logs lost during the twelve months preceding April, 1921, was so much heavier than the corresponding twelve months of preceding year?

A. Without having the figures to predicate my conclusions, I would conclude that it was doe to more logs having been handled during the previous twelve months, but whether that is true or not would be shown by actual loading figures.

Q. My recollection is that other exhibits show the other way around.

A. I can not say. There are a great many conditions which govern matters of logs rolling off, class of timber, district in which it is handled, whether track is maintained to certain standards so that logs will not roll off, and a great many other things—a great many factors.

[fol. 451] By Supervisor Spinner: Are you sure pick-up periods are of the same length?

A. They may not have been of the same length for the reason that during the period of governmental control and immediately following the war the conditions were abnormal and while I have stated that we picked up logs once a year, even that is not strictly so, as it depends altogether upon the condition of our other work and whether a crew can be economically and efficiently assigned to this particular work; and one period of pickup might cover fourteen months and another period only eleven months, so that the whole thing is simply relative.

Q. You referred in your memorandum and testimony of yesterday to the cost of extra brakemen required by the Washington crew law. A. Yes, sir.

Q. I have the same memorandum here which I will read into the record. The statement shows that for the year 1920 on the Tacoma operations, St. Paul Lumber Company, I believe, wages paid for extra brakemen amounted to $2,661.67. Do you recall that?

A. I recall having that prepared by my timekeeper.

Q. On the Quinalt operation, for three months, there being no other charge in the other nine months, there was $195.38, and in May $172.90. The balance is two six dollar items for September and November.

A. The reason for the difference in the expense on the two lines which you have referred to is owing to the fact that on the Tacoma and Kapowsin line they always have more than the statutory number of cars requiring an extra brakeman and on the Enumclaw branch it is only a portion of the time that they had them.

Q. On the Green River branch a total expense of $2,463.98.

A. Same thing is true there; during a portion of the year they require an extra brakeman, and during part of the time they do not.

[fol. 452] Q. That is when trains are short?

A. Yes, sir.

Q. You say those men ride in the caboose and have nothing in the world to do?

A. The extra men have no useful purpose in a logging train in my opinion.

Q. Did you obtain some figures concerning the cost of these logging cars—their value?

A. I did.

Q. I show you N. P. Exhibit No. 30, and ask you to state what this is.

A. This exhibit was prepared on account of a question at a former hearing as to price of log-flats as compared to pre-war prices. A statement was therefore obtained from our general mechanical superintendent at St. Paul showing the information desired, and he replied to a telegram I sent him that he figured from 1910 to 1914 the price was about eight hundred dollars each, and the present price about $1,325 each, both F. O. B. builders plants. Of course to that should be added the expense of transportation incurred in moving them to the Pacific coast or wherever they were to be placed in service. I will also state that for the purpose of checking these figures I obtained cost figures from car building companies on the Pacific coast, but inasmuch as I considered these figures were given me somewhat in confidence I did not think it was best to quote them, except to say they checked very closely with the general figures already given by our mechanical forces.

Q. Do those prices in Ex. N. P. 30 refer to all wooden cars too?

[fol. 453] A. Yes, for the reason that the Northern Pacific as far as possible has continued to use wooden cars, interlocking service, for the reason that when they are damaged, they are so much more readily rebuilt than steel cars.

Q. The cost of steel cars would be greater?

A. For repairs, yes.

Q. And original cost, also?

A. Yes, original cost, I think.

Q. You are more or less familiar with conditions on the Seattle Division in log traffic?

A. In a general way, yes.

Q. Do you know of any difference in the conditions there that would demand any special consideration of log traffic on that Division?

A. The only difference in the situation of the Seattle Division from what I have testified to on the Tacoma Division is the fact that on the tonnage basis they have a long haul tonnage movement.

Q. Is that the only difference now?

A. I was going to explain their log hauling territory is virtually the same as mine on the Tacoma Division—that is, the conditions on their Division where they handle the logs are almost identically the same as with us.

Q. There is already in record accounting exhibits showing the number of cars handled, branch and main line movements, so that there would not be anything to enlighten the court by going especially into that Division, would there?

A. I do not think so.

Q. You think these figures you have given with regard to your operation must apply to that Division?

[fol. 454] A. I think they would, quite closely. There might be some heavier grades on the Tacoma Division in certain branches, but on the whole I think the operation would be very similar.

Q. From what you have testified to and your general experience of thirty years, and eighteen years as superintendent, is it your conviction that the log traffic costs to handle, a greater proportion of the freight revenue than the other general traffic?

A. Than the other carload traffic, yes, sir.

Q. Is the percentage substantially greater?

A. I think so.

Q. Will you give an estimate of it?

A. I do not feel, owing to the very large number of factors entering into it, which cannot be predicated with certainty, that I could give even an estimate of percentage which would be anywhere near correct.

Q. It would be impossible, I take it, to arrive at any exact apportionment of expense between the log traffic and the other traffic, would it not?

A. I think it would be pretty difficult to do.

Q. Is there any accounting system, or any way known, by which such records are kept?

A. There are three or four different ways.

Q. Those are the ways we have been discussing—gross tons, net tons, and car miles?

A. Yes, sir. I think that the results arrived at on those different bases are as close as you can arrive at such a complicated problem.

Q. Those bases take account only of all traffic on the division and are not applicable to any particular kind of traffic separately?

[fol. 455] A. They include all traffic, including logs, and it having been shown by general testimony that the logs are necessarily loaded with very much higher proportion of the expense of operation than general carload traffic, I think that the conclusion would inevitably follow that the cost of handling logs would be quite a good deal greater than the cost of handling other carload traffic.

On any basis you would figure, net tons, gross tons or loaded car mile?

A. Yes, sir.

Cross-examination.

By Mr. Henderson:

Q. Turning to N. P. Ex. 28, that exhibit represents all the cars moving through these terminals, Tacoma, Centralia and Hoquiam, does it?

A. Just the loaded cars which are handled.

Q. Now I think you testified that on your division you had about nine hundred log cars, I think, and about three thousand other cars?

A. During normal times. I think I testified that the total number of cars during normal times on my division was about three thousand cars, and testified that there were about eight or nine hundred logging cars.

Q. The proportion of cars on your division would be nine hundred log cars and twenty-one hundred other cars?

A. Something like that.

Q. Out of that nine hundred cars you get 35% of your tonnage, is that correct?

A. Approximately 35% of the loaded cars.

Q. Also 35% percentage of your tonnage, out of the log traffic?

A. I do not quite get your question. I think I testified that about thirty per cent of the cars loaded on the Tacoma Division were logs, but I do not think I testified as to tonnage.

Q. Logs are heavier than most any other kind of traffic — does [fol. 456] it not per car? Can you think of anything else that loads as heavy as this?

A. Oh, yes, very many commodities. Coal——

Q. How many tons of coal on a car?

A. And sand and gravel—forty or fifty on one car.

Q. And the same with logs?

A. No, sir, I think I have an exhibit which is in, showing something like thirty-four tons of logs.

Q. Seven thousand feet of logs, with eight thousand pounds to the thousand, would be forty-two——

A. You are talking about tons, not feet.

Q. Fifty-six thousand pounds, twenty-eight tons?

A. Yes, sir.

Q. When you load over that, and get eight thousand feet you are loading considerably heavier on the flat?

A. Yes, sir.

Q. Don't you think at least thirty-five per cent of your tonnage is from logs?

Objected to by counsel for Northern Pacific. Objection overruled.

A. I think twenty-five to thirty per cent might be logs.

Q. Let's call it thirty per cent. This exhibit shows you had 900 cars to handle 30 per cent of your traffic, and you had to have 2,100 cars to get the other seventy per cent?

A. I do not think any exhibit shows that. I was requested to advise what I thought was the approximate number of cars in normal times.

Q. On the repair proposition that you testified to yesterday—you had an exhibit yesterday showing the percentage of repairs.

A. The South Tacoma exhibit—that has not been copied.

Q. Exhibit 25, which showed what percentage the bad order log cars was to total bad order.

[fol. 457] A. I showed on this exhibit—referring to log flats only. This exhibit is concerned with logs and log flats only, not to other commodities, and showed a percentage of twelve per cent of cars in bad order during 1920, as shown by the car reports which are in my office each day. But I explained the reason for the discrepancy in percentage of 12% as compared with actual percentages in some terminals of twenty to forty, owing to the fact that we switch on repair track several times a day.

Q. Do you know anything about percentage of other cars that were on repair track durong the same period?

A. I did not prepare a similar exhibit for the year, but an exhibit which was introduced this morning shows the information for another period of the other cars as compared to log flats. I think that the percentage of other cars if I had prepared such an exhibit would be considerably less than twelve per cent.

Q. At least half of your carload business is done on log flats, is it not?

A. No.

Q. Your Exhibit No. 9 shows from January to August in the State of Washington, number of carloads of logs 71,785; all other carloads 66,421. I want to get the proportion or percentage of other cars than logs that are in your terminals that are repaired for intra-state business. Can you find that out?

A. I have no figures to show that.

Q. Until you do get that figure, this percentage is not comparable to anything, but simply shows there is twelve per cent in there?

A. That shows cars simply for logging-flats.

Q. You do not know how that would compare with figures on other intra-state carload business, do you?

A. I do not.

[fol. 458] Q. Can you think of any shipper of logs that offers less than ten carloads in a shipment?

A. You mean any shipper that ships less than ten cars?

Q. Yes, sir.

A. We have lots of them.

Q. Is that because they cannot get cars or do not get them?

A. Haven't got timber to ship.

Q. Do you know of anybody that operates less than one side at a time in timber?

A. Yes, sir, there are a good many shippers now of logs in single cars, and lots of two and three cars a day.

Q. Where?

A. One at Little Rock.

Q. How many other places?

A. There is a little shipper at Old Guard, near Nisqually, another at Crocker, a little shipper at Enumclaw—a good many of them.

Q. A great majority of your log traffic is handled by log operators who never operate less than one side at a time?

A. Yes, as regards the total.

Q. Any logger who is operating one side at a time will get ten to fifteen cars every day he is shipping?

A. Our experience has been that if we get an average of ten cars to a side, that shipper is operating pretty efficiently.

Q. Do you think of anybody operating one side and getting less than ten to fifteen per day?

A. I have not been on the ground to watch the operation, but the results obtained indicate that owing to break-downs and various exigencies such as occur in anything like log operations, there are a great many times when they offer us less than ten cars.

Q. In one shipment?

[fol. 459] A. Yes, sir.

Q. I think you testified awhile ago they always took advantage of ordering ten cars, because they couldn't get them, and you had very few train-load shipments?

A. I did not say they always did. I said our experience is that they sometimes did.

By Mr. da Ponte: That was in car shortage time?

A. Yes, sir.

By Mr. Henderson: Where do you ever have cross-hauls in logging business?

A. I will state that I read into the record yesterday a statement showing the cross of a great many shipments. That would be a loaded car or an empty one way and the other. For the reason that movement is so complicated that where loaded cars are moving each way it is absolutely impossible at all times to so distribute the empty cars that they will always move in one direction and the loaded cars in another; it is a very complicated situation. A camp may close down or be moving and close down temporarily, and result in a number of surplus empties in such territory, so it is necessary to move back to some other territory thus involving a cross haul of both loaded and empty cars. If I desired I could give a great many other movements which involve cross haul of cars.

Q. Of logs?

A. Of logs. I think I covered that fully in my testimony yesterday.

Q. Where do you haul any logs through tunnels? You discussed the question of tunnels yesterday as related to log traffic?

A. We do not haul any cars loaded with logs through Point Defiance double track tunnel. The reason for that seems perfectly obvious.

[fol. 460] Q. I wanted to know where the tunnel business entered into the logging business.

A. That prevents our taking advantage of log grade operation through Point Defiance tunnel with logs, where logs are shipped from Grays Harbor line or from main line to Tacoma, as is getting to be quite common, we have to set the logs out at Centralia or Tenino, from trains which are already moving towards Tacoma over Point Defiance, and pick them up again and handle them over the heavier grades on what is known as the Prairie line through Rainier and Roy into Tacoma, when it would be much more economical if we could handle them through Point Defiance run to Tacoma.

Q. Do you ever have helper service on that Prairie line for logs?

A. Most every day.

Q. Where else do you have helper service on log operations?

A. Between Pe Ell and Francis on the Willapa Harbor line, and what amounts to the same thing on the heavier grades on the Green River branch, and Orting branch, where instead of having helper service, we double into the terminal at the top of the hill with the empty cars; the loads are moved down.

Q. How many tons can one engine pull over the Prairie line without a helper?

A. That depends upon the class of the engine.

Q. Ordinarily?

A. I have not my tonnage rate sheet here and could not say without looking at it.

Q. It would be a pretty good sized train of logs to require a helper, would it not?

A. The reason I have testified helper service was caused by logs is because I have in mind a particular log shipment which moves over Prairie line. Turvey Brothers ship logs from Macintosh near Tenino to Tacoma, and sometimes the Skookum Lumber camp at [fol. 461] Tenino ship to Tacoma and trains moving over Prairie line pick these logs up and in order to avoid a double it is necessary for us to give them a helper engine.

Q. You take the balance, the majority of your log traffic. It does not move over lines requiring helper service. The St. Paul Lumber Company does not get helper service for its hundred thousand cars a year?

A. A hundred thousand cars was all that was loaded on the entire Northern Pacific.

Q. Is helper service required on the St. Paul Lumber Company operations?

A. While it does not require helper service, they were operating on heavy grades and it was necessary to double their trains of empty cars into the terminal at the top of the hill at Lake Kapossin.

Q. What do you mean by "doubling"?

A. On lines with broken grades, sometimes trains can pull the empties up as far as level track on a moderate grade for instance, and then stop or stall, and cut off a portion of the head end of the train and pull it up to the top of the grade and set it out on a siding and return and get the remainder of the train, which is just the same thing as helper service.

Q. With reference to shipments of logs offered you in lots of ten, what is more profitable to the railroad company, and which is the more inexpensively handled, a shipment of ten cars of logs that is spotted on the side track or ten individual shipments of one car each at ten separate points?

A. You mean whether it would cost more to pick up ten cars of logs from one location rathern than to pick up ten separate cars one at a time, each at different locations?

Q. That is what I mean.

A. It would cost more to pick up ten cars at separate locations.

[fol. 462] Q. The delay in time of trains is caused by stopping at these various stations to switch out cars in order to pick up these individual cars, is it not?

A. That is one of the particular causes of delay in train movement.

Q. That is what goes into over-time?

A. Yes, sir.

Q. So if you can pick up ten cars at one place you do it with a great deal less time and great deal of less expense than by picking up individual cars, as you can save yourself a good deal of overtime?

A. As far as that particular factor is concerned, yes, sir.

Q. Returning to the question of helper service, on the movement from Grays Harbor, just where is the helper service required?

A. We do not have any helper service on the Grays Harbor line.

Q. From Grays Harbor to Tacoma?

A. From Prairie line to Tenino and Rainier, as a matter of convenience on account of helper, terminal being so near, we take on a helper engine there, a one-per cent grade.

By Supervisor Cleland: You mean you take loaded log cars from Grays Harbor by way of Gate to Centralia?

A. Yes, sir.

Q. Has the Northern Pacific been buying any new logging flats in the last five or six years?

A. I do not think so.

Q. With reference to this revenue shown in these exhibits of Mr. Peterson's, do you know, Mr. Albee, whether or not in addition to this revenue here shown, the railroads have anything coming from the Government for any of the freight operation?

A. I have no knowledge as to that.

[fol. 463] Cross-examination.

By Mr. Carey:

Q. In these exhibits you have put in showing the cost of repairing log-flats, do these expenses include only repairs that have arisen from log traffic, or are they for repairs on all cars that might be available to haul logs?

A. Which exhibit do you refer to?

Q. Several of them.

A. The repairs to log flats are allocated entirely to log traffic.

Q. Do you include only repairs to operate flats turned to log service?

A. Yes, sir.

Q. That would not include any flat cars used indiscriminately for logs and other traffic?

A. No, sir.

Q. You said, if I recall, that during one period you had an average of nine hundred and twenty seven flat cars in the log service on your division?

A. Yes, sir.

Q. In that, three-fourths, or seventy-five per cent were equipped with patent bunks?

A. Yes, sir.

Q. And the other twenty-five per cent that had no bunks were equipped with wooden bunks?

A. They have wooden bunks. All cars in logging service are equipped with bunks, either timber bunks or what is known as patent or steel patent bunks, and the cars equipped with steel bunks have also intermediate wooden bunks; the reason for having bunks at all for log traffic is to save the deck of the car from unnecessary damage owing to inequalities, knots &c. in the logs.

Q. These wooden bunks simply consist of large square pieces of timber that are put cross-wise of the car?

A. Yes, sir.

[fol. 464] Q. And there are about four or those on the car?

A. Yes, sir.

Q. When you are operating cars with wooden bunks, that requires you to use wooden stakes on the sides of the car?

A. Yes, sir.

Q. The steel bunks are a patent mechanism and when a car is equipped with a pair, has high speed?

A. Yes, sir, they have a locking device which holds the stakes in an upright position until it is desired to unload the logs and the device trips the stakes.

Q. So, in unloading with patent bunks, what serves as stakes are released simultaneously?

A. Yes, sir. The reason for more cars being damaged which are equipped with wooden bunks is due to the fact that you cannot trip the stakes—you have to weaken a portion of the timber by cutting out a portion on the side where you unload the logs.

Q. That results in greater repairs because it is difficult to so cut the stakes as to have them all break at the same time?

A. Yes, sir.

Q. The logs being unloaded from the cars with the wooden stakes, are apt to go off in irregular fashion?

A. Yes, sir, inevitably.

Q. When did the Northern Pacific start to equip these cars with these patent bunks?

A. I do not remember exactly. Sometime maybe ten or twelve years ago, maybe longer. It was largely a matter of experiment at that time because there were so many devices and neither the loggers nor the railroad had sufficient experience to tell whether or not any one of them would be found efficient.

Q. You tested the use of these bunks out rather generally before you adopted them?

[fol. 465] A. Yes, sir.

Q. The result of that experience has been that the use of bunks has been quite advantageous over the use of cars without bunks?

A. Yes, sir, I think fewer cars are damaged which are equipped with steel bunks.

Q. Now one of the disadvantages of using cars without patent bunks is that the load rides more unevenly and there is greater danger of the logs rolling off?

A. No, I do not think that is true.

Q. Just in what respect does the use of bunks facilitate the log movement?

A. As far as the railroad is concerned, as I have already explained, it facilitates unloading of the cars.

Q. You get, hence, a greater car mileage?

A. Not necessarily, but it throws less strain on the cars when being unloaded.

One element that you mention in expense of log traffic was heavy car repairs. That is somewhat minimized is it not by the use of patent bunks?

A. Just that one element of damage to the sills caused during the unloading of the cars I think is minimized to a certain extent but the other classes of damages to which I have referred which is an ever so much larger portion of the damage that necessitates cars going to repair tracks, what is known as penalty defects, occur with just as much frequency as they ever did. Penalty defects, I will explain, are those which result in damage to what is known as safety appliances. The Interstate Commerce regulations compel the railway company to maintain these safety appliances in 100% condition as far as possible to do so; these are sill steps, brakes, handholds &c. &c., all of which are equally liable to damage in connection with both loading and unloading of logs.

[fol. 466] Q. Those are the repairs that you are able to make without bringing the car onto the repair shop?

A. To the repair shop for heavy repairs, yes, as far as repairs taking place at South Tacoma is concerned, but not as far as bring-

ing cars to the repair track is concerned. It can be seen that to make repairs of the mind I mentioned necessitates a car repairer gang going down under and between the cars, and he can only safely do so at a place where the cars are locked up so that they cannot be moved, which is the case with our repair track. Repair tracks are tracks which are used only for bad order cars and they are protected by private locks controlled by the car foreman and a train order to switchman before switching repair track has got to be given, without injuring the lives of employees under or upon the track, signed by car foreman showing that he can safely switch that track which is the reason for all these minor defects being repaired on repair tracks. If it were not for that they could be repaired at any yard.

Q. These repair tracks—you have a number of them over your Division?

A. At every terminal point.

Q. But you have only one place where you make heavy repairs, and that is at South Tacoma?

A. Yes, sir.

Q. Whenever you get broken sills or heavy repairs of that character, you have to take the car into the shop?

A. Yes, sir.

Q. These heavy repairs that would require hauling into the shop are minimized by the use of patent bunks?

A. I think they are to some extent reduced as far as damage caused by unloading is concerned, but I do not think that is true as regards damage by loading where poor judgment is sometimes used, dropping in on a car, or dropping down at high speed makes a severe shock.

[fol. 467] Q. One great element of damage in log flats, if you have no bunks of any kind, is danger of inequalities of logs breaking through the floor of the car?

A. Yes, sir, and another reason is that logs would not roll off the car when unloading if you did not have bunks on the car.

At this point the hearing was adjourned for a five minute recess.

[fol. 468] Cross-examination.

Mr. Carey:

Q. Have you ever had occasion to investigate whether or not it is possible to load a greater amount of timber on a car with bunks than when without?

A. We never had any occasion to investigate that because we don't consider it practicable to load logs without bunks on the cars.

Q. I am referring to the patent steel bunks?

A. Ask the question again?

Q. I asked you if you had ever had occasion to investigate whether it was possible to load more logs on a car equipped with patent bunks than on a similar car not so equipped?

A. I don't think there is any difference.

Q. It is your judgment though, that it is impracticable to haul logs on cars not equipped with bunks?

A. That is my judgment.

Q. From the statement that you read in evidence here yesterday concerning these cross-hauls, I infer that as an operating matter it is impracticable to assign any particular number of cars to the service of any particular camp?

A. That as a rule is true Mr. Carey, and as we are necessarily required to distribute cars impartially, without discrimination, that results in cars being put in what you might call "pots" in each territory. For instance the log cars centering at Tacoma go into the Tacoma pot and those centering at Grays Harbor in the Grays Harbor pot.

Q. So that if there was a logger who had a daily capacity of 25 cars and you assigned 25 cars to his service, in times of car shortage [fol. 469] you would have to take part of those cars from him and distribute them throughout the division in order to make an equal division to all shippers on the division?

A. That is true, and that is one of the reasons which results in cross-haul of cars. For instance, I have already explained in regard to these various "pots" as I called them, in the various territories. Now supposing that a shipper for instance on the Willapa Harbor line has been shipping logs from Lebam to Raymond and he suddenly found it to his advantage to discontinue his Raymond shipments and ship to Hoquiam, which is an actual occurrence I have in mind, and he would ship logs to Hoquiam for two or three days; he would thereby take the log cars out of the Willapa Harbor pot and transfer them to the Grays Harbor pot, and that would result in the log flat situation in Grays Harbor becoming overloaded with cars and the Willapa Harbor pot would be short just that much, which would necessitate the entire re-arrangement of the distribution of the cars to equalize that situation.

Q. As between different subdivisions of your own division?

A. Yes.

Q. And also as between different shippers on your division?

A. Not only that but also as between the Seattle and Tacoma Divisions.

Q. That is what I mean: Say for instance you would assign a certain given number of cars to a man down in the Grays Harbor territory, with the fluctuations of the business it might be necessary at times to divert some of those particular cars to the Seattle division? [fol. 470] A. Yes sir.

Q. Now before we pass from this question of car repairs; as a rule the damage to the log flats is repaired immediately after the damage occurs?

A. As far as possible.

Q. Now with your other equipment, box cars, gondola cars, etc., when you have a surplus of equipment very frequently you don't repair the car as soon as the damage occurs, but delay those repairs until you have demand for them, actually have to use the cars——

A. That is not only true with the equipment that you mention but also true right at the present time with the log flats.

Q. That is true now on log flats?

A. Yes sir.

Q. But as a rule you repair the log flats as soon as the damage occurs?

A. As a rule we do with the other cars too.

Q. You were speaking yesterday—I thought you referred to it, about the expense of operation incurred on your line. Now under your system you charge up to a particular division all the expense that is incurred on that division?

A. Yes.

Q. But when you make a division of your revenue, according to the Interstate Commerce Commission classification as between the different divisions, that is usually made upon a mileage basis, isn't it?

A. That is an accounting matter which I think our accountant testified to and so I would not be competent to reply to for the rea-
[fol. 471] son that I have nothing whatever to do with the making up of the revenue accounts.

Q. Do you know, as a matter of fact that that is the method that is followed?

A. I think that is true.

Q. And so up here on the Tacoma Division all the expense of originating the traffic on the Tacoma Division is charged to the Tacoma Division?

A. I don't think that is true unless it is traffic which—now let me get you right——

(Question repeated.)

A. All the expenses of operation on the Tacoma Division, whether it is in connection with the originating traffic or not, is charged to the Tacoma Division.

Mr. da Ponte: I object to his asking this witness an accounting question.

The Director: I think the witness is able to take care of himself. If he can't answer he can say so.

Mr. Balmer: It takes up a lot of time.

Mr. da Ponte: Yes——

Mr. Balmer: I think if he is asking the witness for accounting matters he ought to have an accountant——

Mr. Carey: Well, Mr. Albee testified yesterday about operating statistics.

Mr. da Ponte: Operating statistics is all right, but this is an accounting matter——

The Director: Go ahead.

[fol. 472] Mr. Carey: That is what I wanted to make clear, that all the expenses occurring out in his territory is charged to the Tacoma Division.

Mr. da Ponte: That is the question I want to object to.

The Director: The objection is overruled; answer the question if you can.

A. Well, I have no knowledge as to how these accounts are made up other than general ones. It is my understanding that all of the operating expenses on the Tacoma Division is charged to the Tacoma Division, but, as to allocating that as between different classes of traffic, I would have no knowledge at all.

Mr. Carey: Well, I am not asking you as to the division between different classes of traffic. Now if it be a fact that in dividing the revenue arising from that traffic the revenue is divided between the different divisions on a mileage basis, then it results that the Tacoma Division or the originating division does not get a proportion of the revenue in proportion to the amount of expense that has been charged up against the particular traffic?

A. I couldn't answer that question as I have nothing whatever to do with the revenue part of it.

Q. Well, take this situation: take a carload of lumber for instance, that originates on your division, all the expense of originating it is charged to your division as it is incurred?

A. I have already testified that all the operating expenses on the Tacoma Division are charged to the Division, as far as operating may be concerned; that is simply for the purpose of affording a measur-[fol. 473] ing stick to the officers of the Tacoma Division as to their efficiency of operation, and in no way compares with the expense or has nothing to do with the expense which is charged to certain traffic, which is entirely an accounting matter.

Q. Now again referring to this carload of lumber that I am assuming, if that moves to the Minnesota Transfer why of course it moves over all of these divisions, Idaho, Montana and the Dakotas?

A. Yes.

Q. Now no part of the terminal expense in Washington, of course, is charged against those Eastern Divisions?

Mr. da Ponte: He has already said that he couldn't answer and I don't see why we should waste time with a witness that was not offered for that purpose and was not examined on it and who is not qualified.

The Director: Can you answer the question?

A. No, I can't answer that; I am not qualified to answer it.

Mr. Carey: You gave yesterday a history of the log traffic and said something about the rates that were in force in the early days?

A. I outlined the conditions which governed in those days.

Q. That business or industry grew up under conditions of relatively low rates, that you mentioned?

A. Yes.

Mr. Carey: I think that is all.

Mr. Henderson: I want to ask him a little further. I notice here on an exhibit that is already introduced in the record, I have not the number of it, but it is the Northern Pacific Exhibit showing re-[fol. 474] pairs to freight cars on the Seattle and Tacoma Divisions in the State of Washington for one year, July, 1919, to June, 1920,

405 cars for the whole year, and on this Exhibit you introduced this morning you show 680 cars for one month, can you explain that?

A. The Exhibit which I have filed, which is Northern Pacific No. 27, was prepared under my supervision by the yardmasters at the terminals referred to, Tacoma, Centralia and Hoquiam, and is the actual result for those months. That includes just running repairs, slight damages such as I have testified to, mostly penalty defects. I have no knowledge as to the details under which this Exhibit which you refer to, dated St. Paul, March 15th, 1921, was made up, or what is included. I never saw the Exhibit until you called it to my attention now. I don't think that includes all the repairs to the log flats.

Q. Now I want to go right back to the question that I asked you awhile ago, with reference to logs loading heavier than the average; your answer to that was, wasn't it, that the log cars are loaded heavier than the average carload loading?

A. I would say just about the average.

Q. Now your Exhibit, the only Exhibit which was introduced at the last hearing, showing your point to point movement in the State of Washington, shows an average weight of over 68,000 pounds. Your annual report for 1920 shows the total loaded car miles to be 67,399,486; total ton miles 2,900,495,141, which gives an average load, including logs, of 30 tons, and your report on point to point movement shows an average for logs of more than 34 tons. Wouldn't that indicate that your logs are considerably above the average in weight?

[fol. 475] A. Well, it would indicate that they were slightly above the average probably.

Q. What is the practice of the Northern Pacific with reference to putting their old flat cars into the log service?

A. There is no practice of that kind. The Northern Pacific endeavors to maintain its cars as well as other portions of its equipment and road in efficient condition all of the time, and not to allow its equipment to run down in any way; and this applies to log flats, that while it is true, as I have explained, that the flats assigned to the log service are wooden cars, it is not true that they are old, in the sense that they are defective cars. We don't aim to let our cars become defective; when they need rebuilding we rebuild them. And it is just like a man, he may not have the same body that he had 10 years ago but he is the same man just the same, and these cars have the same car numbers, and they are maintained to Northern Pacific standard of efficiency all the time.

Q. Well do you use your logging equipment for any other purpose than shipping logs, that is, do you ship lumber on them or anything of that kind?

A. Not when it is equipped for the logging service. I explained yesterday that the log flat equipment was made somewhat elastic to about 25%; that cars equipped with wooden bunks from time to time are stripped of those bunks and put into other service.

Redirect examination.

Mr. da Ponte:

Q. These average weights, of course, include your L. C. L. freights, [fol. 476] which run about 3 to 5, and 10,000 lbs. to the car?

A. The average weights which are referred to by Mr. Henderson?

Q. Yes?

A. Well, I don't know the basis on which those annual report figures were based, whether they include cars loaded with merchandise or not. It was my impression that he was referring to loaded cars only.

Mr. Henderson: I referred to the loaded car miles and loaded cars.

A. Well, that would include merchandise cars.

Mr. da Ponte: It includes hay and a lot of very light commodities of all kinds?

A. Yes sir.

Mr. Henderson: There is only 224,000 tons of L. C. L. reported.

Mr. Capron: That don't make any difference in your car miles if its is moving 1,200 lbs. from one station; that is shown in the car miles.

Mr. da Ponte: Anyhow the proper comparison is between logs and other commodities of similar grade?

A. Yes, heavy carload freight.

Q. One question I want to ask you that was asked you yesterday: That inasmuch as a car loaded with logs weighs as much as three empties on the weight basis, you assume that you ought to compute your estimated expenses on the basis of three to one instead of two to one, as used in all the Northern Pacific Exhibits which Mr. Peter- [fol. 477] son testified to. Now explain what that method is by adding, to show the expense of all the loaded cars, one-half of the empties——

Mr. Henderson: We object, as the witness is not an accounting witness.

Mr. Balmer: He is an operating witness testifying about expenses in operating——

Mr. Carey: I object; the witness is not so wholly ignorant of accounting matters as he was when I was examining him.

A. Loggers have suggested in the case of the log traffic, that we should use the cost of handling three empty log flats as the equivalent of the cost of handling one load of logs.

Mr. Henderson: If the witness please we have never done anything of the kind or even suggested it. We are trying to find out the weight per loaded car mile.

Mr. da Ponte: That is what we use them for——

Mr. Henderson: I think they were loaded for cost all right, I will admit that.

Mr. da Ponte: Well, that is the intention, go ahead?

A. This, as I understand it, is based upon the fact that the tare weight of two log flats is approximately the same as the gross weight of one car loaded; and this is predicated upon the erroneous assumption that the two for one cost basis is grounded solely upon tonnage hauled, which is not the fact. This two for one basis takes into consideration to a large extent the actual condition surrounding the movement in many territories of empty cars. In that regard I would explain further that most roads in figuring the cost of handling the empty cars figure on the basis of equated tonnage, which means [fol. 478] that the wheelage friction caused by the additional number of empty cars required to handle a certain amount of given tonnage is greater than the same tonnage handled in a less number of cars. That to handle 1,000 tons, for instance, in loaded cars causes a less drawbar pull on the engine and less tractive power than to handle the same tonnage in empty cars. And this has resulted in a plan, which is well known among operating officers, of equating the tonnage to take care of this increased expense due to the greater drawbar pull of empty cars as compared with loaded cars. This has been divided in various ways, but a crude method, which is fairly approximately correct is, to add to the tonnage of empty cars, to take care of the greater tractive effort required to pull empty cars, five tons for each car. On the Seattle Division, for instance, this is taken care of by what is known as a tonnage machine, which is a calculating machine for figuring the tonnage of trains, to avoid the time which it takes to figure it up, adding up large columns of figures, and this tonnage machine is so arranged as to give a tonnage for each empty car of 25 tons, although the actual average weight of empty cars handled in the State of Washington is somewhere around 18 or 19 tons; but this loading, which is arbitrary, is arranged by the machine calculating a tonnage of 23 tons for each empty car. I think other roads have a similar method of loading their rating to take care of this factor.

Mr. da Ponte: Now in these figures Mr. Peterson used, however, he did take the actual tare instead of using that method you have just stated?

A. It is my understanding that Mr. Peterson took the actual tare of all cars including the log flats, which he figured at 18 tons.

[fol. 479] Q. Now using 18 tons for the weight of a log car instead of 14, which is the ordinary method, as you have detailed, of adding about 5 tons to the car——

A. That is a rough approximation——

Q. Well is that fully justified as reflecting the actual cost, in making your operating figures?

A. I think so.

Mr. Carey: Why don't you use 19?

Mr. da Ponte: Well, we wanted to be a little under in order to save a quibble.

Mr. Henderson: Why don't you add the 5 tons to the 18?

Mr. da Ponte: Well, he is using the actual there. We had to transpose them and that is the only way you can possibly do it because you have your estimate of two to one.

Mr. Welsh: At the conclusion of the last hearing I asked for and the Commission ordered, that the carriers submit a statement showing the amounts that they had collected on each car by reason of its being equipped with patent bunks. If the Northern Pacific has such a statement I would like to have it introduced. I have been presented with a so-called statement, being known as Special 198——

Supervisor Cleland: That was attached to that list of exhibits which Mr. Peterson had yesterday.

Mr. da Ponte: That was handed to you in response to that request.

Mr. Welsh: Now is this the only statement you have prepared in response to that order of the Commission?

Mr. da Ponte: I know of no order of the Commission. I will [fol. 480] say to you, that we don't recognize any right or obligation to furnish you any statement that you may see fit to ask for. Now we furnished you voluntarily that statement. I want you to recognize the fact that we don't admit you have any right to ask for statements——

Mr. Welsh: You said you would comply with that request and you haven't done it.

Mr. da Ponte: Now if you want any statements you can go and get them at your own expense.

Mr. Welsh: All right, we will use the power of subpœna.

Mr. da Ponte: All right, use your subpœna.

Recross-examination:

Mr. Welsh: This statement here has been submitted in response to that request, as I take it, and as the statement itself evidences, it only covers the operations of portions of the Northern Pacific and not that portion which confines itself absolutely to what are known as the contract bunk. In other words they had two methods of collecting for bunks, one of which was where they required the shipper to enter into a contract providing that he pay 50 cents per car until such a time as the car had earned a sufficient amount to pay a fixed sum, named in the contract, for the installation of the bunk. That is what they were to furnish us in this statement. The other method was, that they required each shipper to pay 50 cents per car for a load or a trip for the use of that bunk; and we are not furnished with that information. I don't suppose this hearing will be concluded today anyhow, so I will endeavor to get that information, but I want to ask Mr. Albee a question: Mr. Albee, have you any figures with you showing the amount that the Northern Pacific [fol. 481] has collected on cars equipped with bunks other than those covered by a written contract?

A. I have not.

Q. What Department of the Northern Pacific could furnish that information?

A. The Auditing Department could furnish that information, it keeps account of all matters of that kind.

Q. Have you, anyone here from the Northern Pacific that could furnish us that information now?

A. I don't think so.

Mr. da Ponte: Say whether you know or not?

A. There may be someone here——

Mr. Welsh: You needn't coach the witness.

A. I have no knowledge as to that at all.

Q. You don't know whether there is anyone here that could furnish that or not?

A. No sir, I don't think so.

Q. Now as to the patent bunks Mr. Albee, isn't it a fact that the patent bunks reduces the casualties to a great extent?

A. I have already testified that I thought it did, as far as broken sills are concerned.

Q. No, but I mean from the personal standpoint, in the unloading of the cars.

A. What do you mean by personal standpoint?

Q. Hazard to the employe.

A. The employe of the loggers?

Q. No, the brakeman, or whoever has to chop the stakes?

A. A brakeman never did chop a stake.

Mr. Carey: The brakeman only rides the caboose——

Mr. Welsh: Someone in the employ—now you can laugh at me but I want to tell you that you are not within your rights in so [fol. 482] doing, as you know that the question I asked you was perfectly legitimate, and all of your fun and talking is uncalled for. Now you know and I know, that someone in the employ of the railroad invariably chop those stakes, don't they?

A. No sir.

Q. Who did it?

A. The loggers.

Q. Where you unload them on your spur?

A. Unloaded on the log dump, and the unloading of the logs, as far as chopping the stakes is concerned, was always done by the loggers.

Q. Didn't you have certain operations where the railroad company unloaded those logs?

A. There was only one operation where that was true, and that was an old contract, where the Weyerhauser Timber Company and the Northern Pacific entered into a certain contract, which has expired a couple of years ago, in which case according to the contract the railroad company unloaded the logs.

Q. Do you recall the McCormick logging operations in South Bend where the railroad unloaded the logs, and there was a man killed there?

A. I don't think we ever did unload there.

Q. All right, it is a matter of proof on our part. Now speaking of the helper service from Francis to Pluvias, commonly known as the Francis Hill, do you mean to say you maintain an engine there for helper service regardless of whether or not any part of the train consists of logs?

A. Provided there is enough tonnage to justify maintaining the service.

[fol. 483] Q. Is that during the usual operations on that Branch, as a daily occurrence?

A. To have trains helped?

Q. Yes?

A. Yes.

Q. And the logs that are being shipped over that Branch to Tacoma or otherwise are shipped out not as a special log train but in the regular freight trains, are they not?

A. Yes.

Q. And your helper service is not necessitated exclusively by reason of the logs being in the trains, but would be required in any event, wouldn't it?

A. I don't think so. I think if it were not for the logs which are moving both ways we could get along without helper service.

Q. You just said that you maintained a helper service there nearly constantly?

A. I didn't say so. I said we maintain helper service if there is sufficient tonnage to justify it.

Q. And there is tonnage enough to justify it regardless of whether or not there is being logs shipped, is there not?

A. No sir, I wish it did.

Q. What is the tonnage you can handle over that hill with your present locomotive equipment?

A. I don't know without looking up the tonnage rating.

Q. Now speaking of the helper service from Tenino to Rainier, over the Prairie Route, that road is owned exclusively by the Northern Pacific isn't it?

A. It is owned exclusively by the Northern Pacific, but the Great [fol. 484] Northern under contract has joint trackage rights.

Q. And the other road by way of the tunnel, it is jointly owned, isn't it?

A. No sir; the Point Defiance line is owned by the Northern Pacific and operated under joint trackage rights by the O. W. R. & N.

Q. The movement of logs from Tenino to Tacoma is very light isn't it, compared with the movement of other freight?

A. Sometimes. Just now there is very few logs being shipped that way. Occasionally there has been times when there has been 15 to 20 cars per day.

Q. But isn't it true that on that route from Tenino to Rainier, that you are compelled to use a helper on your freight trains that are not composed of logs?

A. Sometimes. It depends upon the tonnage moving.

Q. It is a common occurrence under normal conditions isn't it?

A. Yes, if there is sufficient tonnage moving to justify it.

Q. Well don't you fill out full tonnage from Centralia routed over that road?

A. Yes.

Re-redirect examination.

Mr. da Ponte:

Q. This statement regarding the amount collected from the shippers on patent bunks, shows on the bottom of the statement the information which Mr. Welsh required; and in regards to his criticism I want to say, that it is a more accurate statement than any other statement that he has had about the cost, even his own side of it——

[fol. 485] Mr. Welsh: That remains to be seen Mr. da Ponte, we may surprise you.

Mr. Balmer: In connection with the fairness of considering the extent of the movement of two empty cars as one, as equal to the movement of one loaded car, what is the longest train of loaded cars that you have handled on your division at any time?

A. 99 cars.

Q. 99 loads?

A. 99 either loads or empties.

Q. Assuming that you could handle 99 loads over a certain portion of your territory, would it be physically possible over the same territory to handle that same number of empties in the same train?

A. No sir.

Q. Would it as a matter of fact be possible to handle twice that number of empty cars?

A. No sir.

Q. Is it or isn't it true that at times in the handling of the business, such for instance as the logging business, the necessary route over which the empty cars must be moved for the purpose of getting them to the place where they are going to be loaded is such that it would be impossible for you to utilize twice as many empty cars as you expected to have loaded?

A. Will you please state that again?

Q. I think I had better re-state the question, I think it is a little bit obscure. What I mean to say is this: In connection with this question of considering the expense of the handling of two empties [fol. 486] as equal to the expense of handling one load, isn't that factor determined in some degree by the impossibility of your handling as a matter of fact, in economical operation, two empties in the place of one load?

A. That is true. It depends very largely upon the physical conditions in the territory where the movement is to be had.

Q. Can you start a train of 100 empties with the same ease that you can start a train of 50 loads?

A. No sir.

Q. Why not?

A. On account of the slack and the friction, and a good many factors.

Q. In other words there are a great many other factors that have to be taken into consideration besides the mere comparison of the *tare* of the car with the loaded car?

A. Yes sir.

Mr. Henderson: Did you ever haul 99 loads on your Division any place, in a train?

A. I don't think so; I don't recall any time when we have handled 99 loads, but I think that is true that we have for a short distance.

Q. Now with reference to the slack, you cannot start a train of 50 loads unless you have some slack in it, can you?

A. No.

Supervisor Cleland: After you get the train started could you pull a train of 60 empties as easily as you could 30 loads?

A. That would depend altogether upon the physical conditions.

[fol. 487] Supervisor Cleland: Assuming that you are running on the level?

A. I think that is true; I don't think there would be much difference.

Q. There would not be any difference?

A. Not much, if any.

Mr. da Ponte: Take the St. Paul & Tacoma Lumber Company's operations, you haul out of the woods 50 cars loaded?

A. Approximately.

Q. Now in computing these cars, this cost—you allowed only one-half as much for hauling those empties back to be loaded again?

A. Yes.

Q. Now I will ask you whether in actual operations if that is under the actual cost of returning those 50 cars?

A. I would say it was under rather than in excess, because in this particular case that you have referred to, the loads are moved down hill and the empties up hill.

Q. Now that is true in regard to operations very generally?

A. It is true with regard to the majority of it.

Q. And isn't it true that you have your same trainmen expense and you have all the items of expense of returning those empties that you had in bringing the loads down, except your fuel and your wear on the track, and things of that kind?

A. Fuel is, under these circumstances greater for the movement of empties than it is for the loads, but all of the other items with the exception of the wear and tear and hazard and all that sort of thing, would be the same.

[fol. 488] Q. Now if you assume that as a regular haul each way, would the actual operating expense of returning those 50 cars be no more than one-half of the cost of bringing them down loaded?

A. I would say it would be about 50-50 in that case.

Mr. Balmer: You mean that the expense of the empty movement would be as great as the log movement?

A. About the same.

Mr. da Ponte: It would have the same weight of expense?

A. Yes, the entire expense would be allocated to this particular movement.

Mr. Carey: I think it would be proper for Mr. Albee to go out into the hall and explain that to Mr. da Ponte. He has explained it three or four times already.

A. I said that the expense would be allocated to the entire movement, and it would be almost impossible to divide it as between the loaded and the empty movement.

The Director: As I understand Mr. Albee, he says the expense would be about as great hauling the empties back as hauling the loads.

Mr. da Ponte: I thought he said it would be one-half the same.

A. I said about the same.

Re-recross-examination.

Mr. Henderson:

Q. Did you hear Mr. Nicholson's testimony with reference to the 1,000 tons gross being the method of figuring the cost of operation?

A. Mr. Nicholson of the Milwaukee?

[fol. 489] Q. Yes?

A. Yes.

Q. Now returning to this question of loaded car miles, if you use two empties to make one loaded car mile, as apparently you did in this Exhibit, and you then use three to get the real loaded car miles, you would not only be making a difference in the amount of the loaded car miles in logs, but you would be taking that amount from the rest of the traffic, wouldn't you.

A. I would prefer to have an accounting man explain that.

Q. I thought you had just been explaining it?

A. I have not been explaining any accounting features that I am aware of; I have tried to explain in regards to the cost of operation, and I have testified that the movement of two empties to one load didn't represent the cost necessarily, unless all of the various factors, grades, etc., were taken into consideration, also in connection with the operation.

Q. Then your testimony was not to justify the Exhibit of the Northern Pacific No. 18, was it?

A. My testimony is for the purpose of stating facts.

Q. So that your reference to two empty cars to one loaded car didn't have anything to do with reference to accounting, did it?

A. No sir.

Mr. Balmer: Do you know what the ratio of tare to the load is, of the average traffic on your division that you handle?

A. On my division?

Q. Yes, or on the system?

[fol. 490] A. I don't know what it is on the entire system. The average on my division for all classes of traffic, including merchan-

dise, hay, and all the light weight traffic which is handled, is approximately 27 tons, and the average tare weight would be about 18 tons.

Supervisor Spinning: Does that include L. C. L. business?

A. That includes everything that is handled as a loaded car, including L. C. L. business which the conductor reports as a load. It may have only 5,000 lbs. of merchandise in it but he reports it as one load, and that necessarily cuts down the average.

Mr. Henderson: Your annual report here shows 30 tons as the average.

A. I am testifying in regards to my division.

Q. Well, that brings up the question, in speaking of the rates on logs your testimony was to the effect that the cost of operation entered materially into the fixing of the rate, wasn't it—early in the testimony yesterday?

A. I don't think I said that.

Mr. da Ponte: In figuring car miles of course the mileage is accounted for—the mileage is counted if there is only 500 lbs. of freight in the car, as so many car miles?

A. Yes.

Mr. Dudley: Now do the conductors make out their wheel reports, is that stenciled on the car or allowed for principally?

A. Stenciled on the car on my Division. On the Seattle Division I have already testified in regards to this computing machine which is used.

The Director: We will take a recess until 1.30.

[fol. 491] The hearing was resumed at 1.30 p. m. June 25.

J. PETERSON, recalled as a witness for the Northern Pacific Railway Company, testified, as follows:

By Mr. da Ponte:

Q. Have you since you were on the stand, taken Northern Pacific Exhibit 17, and treated the net results of operation in net ton mile basis?

A. Yes, sir.

Q. Please state what you did, how and what the result is?

A. The plan of getting at the result was this: I have taken net ton mile cost as shown on Special 17 for the Seattle, Tacoma and Puget Sound Divisions and then by applying this cost to the log traffic we get a deficit of $37,692.14 as compared with a deficit of $53,267.21 shown on N. P. Ex. 17, which was based on the estimated car mile cost, and a deficit of $50,135.16 on the gross ton mile cost as shown in N. P. 17-A.

Q. In that method of computation you have excluded altogether any tare weight for the weight of the car?

A. Tare weight has been absolutely excluded.

Q. So the question of determining how many empties for each loaded car does not enter into that at all?

A. Not to any extent, no.

Q. What do you mean by "any extent"?

A. I mean on the car mile statement we show an estimate loaded car mile, but in the present figures we are dealing only with net ton miles which do not include any tare weight whatever.

Q. That is actual weight of the car and actual freight?

A. Not only of revenue freight, but company freight as well.

Q. You have to use the non-revenue freight?

[fol. 492] A. We do because the cost of handling same is included with other freight and expenses.

Q. That is coal and such as that which has to be transported in order to carry on operations?

A. Yes, sir.

Q. That is always included in net ton figures?

A. Yes, sir, that is customary, yes, sir. I have a memorandum I wanted to read. As disclosed by testimony of preceding witness the empty car miles in relation to total freight car miles is greater in log traffic than in freight traffic generally as moving over Seattle, Tacoma and Puget Sound Divisions. It is therefore apparent that by use of the basis of net ton miles which does not include weight of car, the empty car mile situation is not reflected. As I explained before the method of arriving at the figure was taking operating expenses on No. 17, and dividing by the number of net ton miles actually computed as shown on Special 18. The result of this computation in general is that it shows, even by using actual business, we were still operating under a deficit of thirty-seven thousand dollars, based on the expenses of the Seattle, Tacoma and Puget Sound Divisions.

Q. The reason it shows a greater deficit on gross ton mile basis is because of the fact that in the log movement the empty car mileage preponderates over empty car mileage in everyday general movement?

A. That is exactly the reason, yes, sir.

Q. The reason computation on loaded car mile basis shows greater deficit is great is because you have included the loaded movement?

A. That is proper. Of course we must bear in mind that loaded car miles is not always indication of the weight of it.

Q. You estimate the loaded car miles?

A. Yes, sir, that is right.

[fol. 493] By Mr. Calderhead: Referring to your Special 150-B, is that No. 17?

A. Yes, sir.

Q. 150-C is 18?

A. That is my understanding, yes sir.

Q. Operating expenses as shown on No. 17 are the expenses incurred upon the Seattle, Tacoma Divisions and upon the Puget Sound Terminal Division?

A. Yes, sir.

Q. And they are all allocated, all the expenses that are incurred there—pro-rated?

A. When we say all expenses we must bear in mind expenses there are not only allocated to state, but to interstate as well.

Q. Yes, and in general your traffic expense you prorate that on the same basis explained in your other testimony?

A. Yes, sir.

Q. When you come to earnings on these divisions, how do you allocate the earnings?

A. The revenue is shown in the annual report as intra-state and inter-state and the division of interstate earnings is based on actual miles of the haul.

Q. On each particular division?

A. Each particular shipment.

Q. And the same would be true of shipments moving from Idaho Division to points on Seattle Division,—you would pro-rate and distribute between those two divisions?

A. Yes, sir.

Q. Is there any mileage on the Puget Sound Terminal Division?

A. For the purpose of computing revenue, yes. They establish mileage for determining revenue between points and include the Puget Sound Division as well as any other divisions. For instance going to Seattle they would take mileage into Seattle even though Auburn to Seattle would be Puget Sound Division.

[fol. 494] Q. So it would get eighteen miles of haul. Would the Puget Sound Terminal Division pay operating expenses on that basis?

A. They would in some cases and in some not. For instance on the train expenses and engine expenses we do not allocate anything to the Puget Sound Division because we figure that the expenses should be charged against the Seattle and Tacoma Division.

Q. That is train men?

A. Well, train service and engine service.

Q. Switching?

A. Switching is all allocated to Puget Sound Division entirely, as well as station service.

Q. That is the reason in the Seattle and Tacoma, Ex. No. 17, you show approximately $310,000 Seattle Station Service, while if you exclude that division you only show $46,400?

A. Yes, sir.

Q. $309,000 includes all yard clerks, station agents, helpers and things of that kind in every office, because they are all freight?

A. It includes all terminal freight, yes, sir.

Q. When you come to allocating earnings for the State of Washington, you only absorb on a mileage basis, while you actually charge to State of Washington operating expenses incurred within the State, and therefore the State of Washington would probably show in red, while Idaho and Montana might show extra earnings?

A. That is the way the situation works out as far as the Division is concerned.

Q. So when you say five or seven dollars is operating expenses per

thousand gross ton miles in this State, and two dollars as operating expenses through Montana, that is because you have not separated the expenses and prorated them on the same basis as earnings?

A. That is one feature, but it works both ways. We allocate to the State of Washington and charge a proportion of overhead on various B. C.'s but we do not assess the State of Washington with any proportion of terminal expenses outside of the state.

[fol. 495] Q. But you do pro-rate to the State of Washington, in fact to all of the states, the general expense and the traffic expense upon some arbitrary basis which is approximately correct, but when you come to expenses incurred within these boundaries, such as terminal expense, you allocate them to the Division or state alone where it is incurred?

A. Absolutely.

Q. There will be, so, an abnormal expense you might say in the State of Washington as compared with a state East, because no traffic goes West of the State of Washington. On your eastern terminals the traffic does go through into Wisconsin and Illinois, and consequently there is not as heavy proportionate expense on movement Eastbound, as on the Western?

A. As applying to State of Washington business,—to business moving in the State of Washington.

Q. Yes, as compared to business moving in the State of Washington. It would show proportionately heavier freight expense in the State of Washington than in other States?

A. What about your lumber shipments to eastern points? Why should you not absorb some part of the expense you get there, to the other end?

Q. Because switching service is not performed in St. Paul for all cars on Eastern end to the amount incurred on this end. All of your terminal expense is incurred on this end, while only a portion is distributed on your cars on the other end.

A. That may be true, but if you do not have these freight offices your terminals would not be so expensive on that other end.

Q. I think your explanation is all right, but if you pro-rate the earnings, why not pro-rate total expense on mileage basis?

A. The matter is up at the present time about a more equitable way of dividing expenses between states; one way is to divide the [fol. 496] interstate either on a basis of train miles, or arriving at some other equitable basis. The plan I outlined is being followed.

By Mr. da Ponte: That is the reason we made a segregation, in order that it would be perfectly frank, and we concede the question is whether—but we do insist you must charge against the logs some portion of the terminal expenses.

By Mr. Calderhead: I had no idea of not charging the logs with their proper portion of any terminal expense.

By Mr. da Ponte: It is just a question as I understand it, as to whether we should charge the log traffic with the expense as shown in the first column, including Puget Sound Terminal, Exhibit 17, or in proportion as shown in the other column.

By Mr. Calderhead: That does not answer the objection I have to

this exhibit, which shows abnormally large operating expenses in the State of Washington on these two divisions because it is charged all of the terminal expenses on these divisions.

By Mr. Cleland: It is not a matter of billing it, or in percentages to the logs, but the entire operating expenses being high in the State of Washington as compared with other States which do not bear the expenses of these terminals.

By Mr. Calderhead: That would follow with greater force where you are at one and of the line, as on the coast.

By Mr. da Ponte: There are some features that would have to be considered when you go into those arrangements, for instance the cost of hauling fifty per cent empty movement Westbound out here to handle this lumber traffic is also apportioned between all of these States where it is an expense directly chargeable to the lumber business originating out here.

By Mr. Calderhead: I have yet to see fifty per cent of any empty car movement moving to the Pacific Coast.

By Mr. da Ponte: Figures will show that Mr. Calderhead, on the Northern Pacific. In fact last year I think it exceeded 50%.

[fol. 497] By Mr. Calderhead: There might be exceptional years or periods when empty car movement would be heavy.

By Supervisor Cleland: Do you intend to develop the point that if the operating expenses were divided more equitably between the States that there would not be here the large deficit shown in the log traffic, or any other traffic?

By Mr. Calderhead: That is what I had in mind, and I simply wanted to confirm that by Mr. Peterson's statement, because we have figures here which I think can easily be worked into a statement, but I did not want to be mistaken in using these statements.

By Mr. da Ponte: If, of course, you take the returns on the system as compared with the showing of the whole, it is not so very much better.

By Mr. Cleland: If these operating expenses are so unusual in the State of Washington there would not be so large a loss in the State of Washington.

By Mr. da Ponte: Yes, but if you spread it out on the system as a whole the showing would not be so much better if these figures were put in. I will ask Mr. Calderhead if he has any theory or scheme by which to more equitably divide this?

By Mr. Henderson: Let's get the Northern Pacific testimony and then the others.

By Mr. da Ponte: It's all in.

By Mr. Calderhead: There is nothing wrong in the statement filed by the Northern Pacific as long as we understand the figures alike. I have no theory or hobby to spread out before you.

By Mr. da Ponte: We were just wondering if you couldn't sit down with our accountant and figure out something which would reflect the proper division of operating expenses.

By Mr. Calderhead: I don't think it necessary to change the [fol. 498] methods of various railroads in this state to conform to some peculiar idea I might have on the subject.

By Mr. da Ponte: I meant to get the dope you wanted in this case.

By Supervisor Cleland: It would be impossible to do that without having these figures and revenue figures from the other States.

By Mr. da Pente: Reports in those states are easily available, as in this state. You take these terminal states and still they have an advantage in having terminals in them, as the matter of employment and the building up of the state, and taxes they pay; it is not an unmixed evil, taking the situation as a whole.

By the Director: When you have a rate hearing in Montana, for instance, Mr. da Ponte, don't you spread a little of this expense up there?

By Mr. da Ponte: Take the North Dakota decision, which was a good example—you don't get any credit in North Dakota for investment in Washington.

By the Director: I would not expect credit for anything in North Dakota.

By Mr. da Ponte: We were not allowed to pro-rate in Montana for expenses in Washington.

By Mr. Calderhead: If we are to base our rates to give the Northern Pacific the same rate of return in Washington as in other States, our rates would have to be very materially higher than in other States on that theory.

By Mr. da Ponte: Yes, sir, but as applied to the case in hand it is not a question of returns, but showing of loss. My judgment is we have to make allowances for these imperfections and you still have to concede a wide margin—that it will more than take them all up. There is still a very, very inadequate return for the service.

By Mr. Henderson: We think they have too large a rate.

[fol. 499] By Mr. da Ponte: I am going to offer the valuation of this property involved, the physical valuation. I do not think that it will be absolute, but it will be sufficient for the purpose of showing what ought to be allowed for the return on the value of the property, and also the taxes, which we will arrange in the exhibit on gross revenue basis, and there will be some minor exhibits which we have not got at this time. It took thirty days to get up these figures. They will speak for themselves, and we will offer them before the evidence is concluded. It will be segregated, including terminals.

By the Director: Mr. Balmer, you may proceed.

By Mr. Balmer: Do I understand, after talking with counsel, that these Great Northern exhibits can go in as indicating what they show upon their face with the same force and effect as though their correctness were verified by the accountant?

By Mr. Henderson: You may put them in the same as if testified to by witnesses on the stand, by the accounting department of the Great Northern.

By Mr. Balmer: I am willing to take it that way if that is satisfactory to all the parties of record here.

By the Director: Is there anybody here that has objection to the introduction of these exhibits in the manner indicated? There is no objection, Mr. Balmer, you may proceed.

By Mr. Balmer: I offer in evidence as amended Great Northern Exhibit No. 1, Accounting Department Statement S-853, showing intrastate movement of log shipments made within the State of Washington, during eight months ending August 31, 1920, three months ending November 30, 1920, and one month ending December 31, 1920, and I will state in explanation that this is the same as Exhibit 1 of the Great Northern Railway Company introduced at the April hearing with this exception that in converting the board foot content [fol. 500] of the logs as shown in that exhibit a factor of ten thousand feet board measure, in this amended exhibit we have used the factor of 8,325 pounds per thousand feet board measure, which takes into consideration the weights on some three hundred cars.

I offer in evidence as amended Exhibit No. 6 (Great Northern), a statement showing Washington intrastate traffic on logs, eight months ending August 31, 1920. Three months ending November 30, 1920, and one month ending December 31, 1920, with the explanation of the use in this exhibit of the factor of 8,325 pounds for one thousand feet board measure instead of ten thousand pounds shown in the prior exhibit.

I offer in evidence Great Northern Exhibit No. 8, Statement No. 310, Railway Operating Revenue of the Great Northern Railway Company in the State of Washington for the calendar year 1920, which is one of the exhibits that was called for by the Department in the present case.

I offer in evidence Great Northern Exhibit No. 9, a statement of three sheets, No. 320-A, showing Railway Operating Expenses, Class 1 Companies, within the State of Washington, on the Great Northern Railway Company for the calendar year 1920, which is one of the Exhibits called for by the Department.

I offer in evidence Great Northern Exhibit 10, two sheets, Accounting Department statement No. 531-B, showing Statistics of Rail Line Operations of the Great Northern Railway in the State of Washington for the calendar year 1920.

[fol. 501] I offer in evidence Great Northern Exhibit No. 11, a statement of two sheets showing revenue freight of various classes carried by the Great Northern Railway Company in the State of Washington during the calendar year 1920, which is one of the reports called for by the Department.

I offer in evidence Great Northern Exhibit No. 12, a statement of one sheet, designated Accounting Department No. S-851, showing the number of loaded cars, number of loaded car miles, total net tons and total revenue from intrastate log shipments in Washington during the calendar years 1919 and 1920.

I offer in evidence Great Northern Exhibit No. 13, Accounting Department Statement S-849, showing total ton miles within the state of Washington of all freight carried during the calendar years 1919 and 1920, subdivided between intra-state and interstate and the percentages of each.

I offer in evidence Great Northern Exhibit No. 14, a full copy of a contract dated April 20, 1904, between the Great Northern Railway Company and the Sultan Railway and Timber Company for

the transportation of logs as set out in the opinion of the Supreme Court of the State of Washington, 58, pages 507-8. That is submitted in response to a demand for an abstract of contract of the railway lines for transportation of logs, and this is the only contract which has been entered into and it is contended to be effective now—I have no extra copies of that, but suppose the only party interested is the Sultan Railway and Timber company.

I offer in evidence Great Northern Exhibit No. 15, a statement of operating statistics covering intrastate Log Movements in the State of Washington compared with all Freight Traffic on the Great Northern System for the month of July, 1920, showing the number of carloads, total net tons, loaded car miles, empty car miles, total car miles, number of cars available for service, average haul, per cent of empty to loaded car miles, average carload in tons, and average miles per day.

[fol. 502] I offer in evidence Great Northern Exhibit No. 16, Accounting Department statement dated April 2, 1921, showing estimate of the cost of handling logs on the Spokane, Marcus and Cascade Divisions in Washington, from September to November, 1920, prepared on the estimated loaded car mile basis. Of that exhibit I have only three copies and will be compelled to get additional copies for submission later.

I offer in evidence Great Northern Exhibit No. 17, a statement showing the valuation of the Great Northern Railway Company properties in the State of Washington as determined by the railroad commission of this State in the valuation order of June 30, 1908, adjusted to the present time on the basis of additions and betterments to the property made since the date of the valuation.

I offer in evidence Great Northern Exhibit No. 18, a statement which shows the amount of seven per cent on the adjusted value of the property of the Great Northern Railway Company in the State of Washington together with the accruals of taxes in the State of Washington on the Great Northern for the year 1920, and with the apportionment of the amount of this interest and taxes considered as applicable to the railway traffic for the months September to November, 1920, based upon the proportion of log car miles during those months and the total log car miles handled during the entire year.

I offer in evidence Great Northern Exhibit No. 19, a statement showing Net Loss to the Great Northern Railway Company from handling logs in the State of Washington for the months September to November, 1920, when taxes and interest as shown in the preceding statement have been taken into consideration.

I have one other exhibit which I will be required to identify by a witness who is present and whom I will call now.

[fol. 503] H. McCaustland, a witness produced on behalf of the Great Northern Railway Company, being first duly sworn, testified as follows:

Direct examination.

By Mr. Balmer:

Q. Please state your name and occupation.
A. H. McCaustland, car foreman, Great Northern.
Q. How long have you been in the car department of the Great Northern?
A. Eighteen years.
Q. Did you attend the last hearing of this log rate case?
A. Yes, sir.
Q. Since the date of that hearing have you kept any record of the cost of repairing log flats at Delta?
A. Yes, sir.
Q. Your headquarters are at Delta?
A. Yes, sir.
Q. You have charge of the car repair work at that place?
A. Yes, sir.
Q. I hand you a statement marked Exhibit G. N. 20, and ask you whether that is the statement you prepared?
A. Yes, sir.
Q. Does this statement show the actual cost as observed by you of repairing log flats at Delta for a period of fifty-two days preceding June twenty-fifth?
A. Yes, sir.
Q. And is this the actual report kept by you as work progressed?
A. Yes, sir.

I offer in evidence Great Northern Exhibit No. 20.

Q. How many log flats were handled into Delta during that 52-day period—the amount 1,608, shown by this statement?
A. Yes, sir.
Q. And of these cars how many were repaired by you or under [fol. 504] your direction?
A. Fourteen hundred and fifty-six.
Q. Out of a total of 1,608?
A. Yes, sir.
Q. Does the exhibit show the character of repairs you found it necessary to make to these cars?
A. Yes, sir.
Q. Were all these repairs necessary?
A. Yes, sir.
Q. Can you explain in a general way the character and necessity of the repairs that you made?
A. Such as side-sills, brake staffs straightened, and brake sills, and decking.
Q. You have made some segregation have you, of the cost of re-

pairing cars that were equipped with bunks and those not so equipped?

A. No, not all of those cars were equipped with bunks. Fifteen of them were bunked.

Q. You show at the top of the first page of your statement a quantity of fifteen cars upon which certain repairs were made, those cars being 43-foot cars?

A. Yes, sir.

Q. Were those equipped with bunks, or not?

A. Yes, sir.

Q. Those are the 43 foot cars in service of the Wallace Falls Timber Company?

A. Yes, sir.

Q. The remainder of those cars are 40 foot cars?

A. Yes, sir.

Q. In the service of the Sultan Timber Company?

A. The majority of them, some in the service of the Wallace Falls Timber Company.

[fol. 505] Q. These 40-foot cars were not equipped with bunks?

A. Not all of them.

Q. What portion of them?

A. No portion of them had the bunks operative.

Q. Explain that a little in detail?

A. Some of them are equipped with turtle back bunks, but none of them are operative at this time.

Q. You mean that the body of the bunk is still across the deck of the car, but that the tripping apparatus is out of repair?

A. Yes, sir.

Q. Have you made any observation in the case of your experience as to the comparison of the cost of repairing log flats with the cost of repairing cars not in the logging service?

A. Yes, the cost of repairing log flats is a good deal greater than other cars.

Q. What is the character of the repairs you generally found it necessary to make on your log flats?

A. Side sills and decking.

Q. What is the character of the damage done to these cars when they come for repairs?

A. Side sill broken and so is decking broken.

Q. Do you find that character of injury happens in other cars at the track?

A. Oh, yes, more frequent.

Q. I mean to ask you whether you find injury of the kind you describe more frequent in cars in log service than in general freight service?

A. More frequent on logging flats than in average class of car. It is very seldom found necessary to repair side sill in box cars.

Q. Have you ever estimated the expense of re-silling a car under present conditions?

[fol. 506] A. It takes about thirty hours at a cost of $24 to side sill any logging car.

Q. Is that the labor cost?

A. Thirty hours is the labor cost.

Q. Have you ever considered what the material cost?

A. About eleven dollars.

Cross-examination.

By Mr. Henderson:

Q. These repairs to brake-staffs, are those on the side or end of the car?

A. On the 43-foot flats on the side, and on the 40, the end of the car.

Q. On which class of car is it you have brake-staff breaks?

A. On all logging flats.

Q. A good deal more on the side than when it is on the end?

A. I do not think there is but very little difference.

Q. How do they break the brake-staff when it is on the end of the car—how does the log break it?

A. On account of the log being too long for the car.

Q. When they are on the side of the car they sometimes break when the log is rolling off too, don't they?

A. Yes, sir.

By Mr. Carey:

Q. Have you ever noticed in your experience that it is quite frequently necessary to repair log-cars where the sill pockets or stake pockets have been torn off, does that frequently happen?

A. Yes, torn off very frequently.

Q. That is in a case where the cars are operated with the stakes. You don't find that where cars are operated with patent bunks to the same extent?

A. I applied 15 side sills in 52 days to cars equipped with Rainier bunks and supposed to be operative.

Q. Where does that appear on your exhibit 20?

[fol. 507] A. Top of the list.

By Mr. Henderson:

Q. These brake-staffs will not let down on those cars, will they?

A. No, sir.

Q. Are you familiar with the brake-staff on other roads, whether they are let down?

A. I have seen them, but I have no cars without brake-staffs.

By Mr. Balmer:

Q. In connection with the question of Mr. Henderson, as to whether or not breakage is greater on cars with brake-staffs on the side rather than on the end, I observe that your statement shows a

total of 1,608 flats handled into Delta of which 1,456 had repair work done to the brake-staffs. Does that indicate that there was damage to brake-staffs of both classes of cars?

A. Yes, sir.

By Mr. Carey:

Q. This exhibit 20 shows repairs made. Do I understand that the first item which refers to 15 cars—were those old cars with bunks?

A. They are assigned to the Wallace Falls Timber Company, 43-foot.

Q. These have patent bunks?

A. Yes, sir.

Q. The next item of 58 cars are without patent bunks, as I understand?

A. Some of them have patent bunks, but they are inpperative.

Q. That amounts to the same thing as cars without patent bunks?

A. Yes, sir.

Q. This covers what period?

A. Fifty-two days.

Q. During that 52 days do you know how many cars with the old bunks were in actual operation?

A. No, sir.

[fol. 508] By the Director: When was this 52-day period?

A. Prior to June 25th.

Q. Ending June 25th?

A. Yes, sir.

By Mr. Balmer: Between the last hearing and the present hearing.

Q. You prepared this statement of your own initiative, did you, without any suggestion from any one?

A. I certainly did.

Q. Can you approximate the number of 40-foot and of 43-foot cars?

A. No, I cannot.

Q. Are the 40-foot cars equipped with these patent bunks?

A. No, sir. They are some of them equipped, but they are all of them inoperative.

Q. There is none of these 40-foot cars that were in use that were repaired that had patent bunks on?

A. I do not get you.

Q. You said that fifteen cars, 43-foot cars, had side sills, and at the same time fifty-eight with side sills of these 40-foot cars had bunks on.

A. I did not keep track of what percentage had bunks on and what did not.

Q. You said only a few and they were not operative?

A. Yes, sir, because we only have a hundred cars, I believe, with turtle back bunks, and they are unloaded at Snohomish and do not come into Delta for repairs unless heavy repairs.

Q. I do not understand you yet. Do these 40-foot cars have patent or turtle back bunks?

A. Not all of them.

Q. It seems that out of that number of 58, a *a* great proportion had patent bunks, and the required side sills, while during the same period only 15 of the 40-foot cars, only 15 needed side sills

[fol. 509] A. Yes, sir, on account of bunks being inoperative,—does not cause breakage of so many side sills.

Q. Turtle back bunk is a protection?

A. It is to side sills, but not much protection to cross sill.

Q. The only expense aside from these is items of decking, which are very small; all the rest is side sills and brake-staffs. There was not any very material expense to repairing the rest of the cars?

A. No, but I might add that the Wallace Falls Timber Company has seventy-five cars I believe equipped with Ranier Bunks and the biggest majority of those seventy-five cars are ready for re-silling, and many of the logging flats.

Q. In 52 days you only put in 52?

A. Yes, sir.

Q. Would practically all the damage on these be mended by taking off the brake-staff from the side of the car and putting it at the end of the car?

A. No, I do not think it would make a reduction in the expense to have them on the end of the car in place of the side of the car.

Q. Why?

A. Because the logger is not the least bit particular how he loads the logs; in fact he don't take the brake-staff into consideration at all; he merely drops logs down where it drops and has to come at, whether it falls on the brake-staff or not.

Q. It does not make any difference. That would not increase it any would it?

A. It is my experience it is about fifty-fifty.

Q. Regardless of where it is located?

A. Yes, sir.

Q. And how is it, are most of the brake-staffs knocked off in loading or unloading, do you know?

A. I cannot say.

[fol. 510] By Mr. Welch:

Q. If if is broken off in loading, does the train crew pull it off?

A. We do not have many broken.

Q. They are inoperative.

A. They are inoperative on account of being bent.

Q. Would they pull a car out in that condition, if the brake was inoperative?

A. From where?

Q. Would they hook on to it?

A. Why, yes sir.

Q. On a main line operation?

A. Yes, sir; we have a right to move to terminal for repairs.

Q. Even loaded?
A. Loaded or empty does not make any difference.

By Mr. Henderson:

Q. Do you say that the side sill material is worth $10.95 each?
A. Yes, sir.
Q. That is the cost of the side sill?
A. Yes, sir; I believe the store quotes it to me at forty-seven dollars a thousand.

By Mr. Balmer:

Q. Another question is raised by another gentleman, as to whether in your judgment the equipment of logging flats with steel bunks reduces the repair bill to the logging flat, and in answering that question I want you to take into consideration the immediate repairs that follow during the early use of that car after it has been equipped with the bunk, and also experience and life of that car during the several years along after its equipment.
A. I do not think that the steel bunks reduce the cost of keeping flats, well, say in a period of four or five years.
Q. What are the facts upon which you base that conclusion?
[fol. 511] A. My experience is that the life of sills in logging flats with steel bunks is from three to four years, when a car has to be re-silled on account of the steel bunks, when they load logs and bend the sills, both the center sill and intermediate sill to such an extent that a very little shock breaks them off.
Q. Is it your judgment that over a period of four or five years the expense bill would foot up about equally for repairs on a car equipped with steel bunks and one not equipped with bunks?
A. Yes, sir.
Q. Are you familiar with the method in which the logging car is handled by the Great Northern, or unloaded at the Weyerhouser dump?
A. I have made a few trips over there to see how it was done.
Q. What caused your curiosity?
A. I was trying to ascertain why it was necessary to break so many sills.
Q. What did you find out as to manner of unloading and dumping down there?
A. I found that the men unloading the cars were not particular of the damage they done to equipment when they hooked their cable to their logs to throw them off. In fact I have removed a lot of sills that had only been tied about ten days to come on to the repair track with bunk shanks torn out of the side sill, which indicated they hooked cable into the side sill to throw the logs off, tearing holes out.

By Mr. Carey:

Q. Those were cars not equipped with bunks?

A. It did not make any particular difference. I have seen them handling from Wallace new Rainier bunks where they would not take the trouble to unlock them, but just throw them over the stakes.

Q. That was careless operation? If the car is equipped with bunks and the bunks are properly operated there is no occasion for [fol. 512] unloading cars with cable, because the patent bunks take care of the logs.

A. Not at Mill B. They use a big derrick. And their incline is not with elevation enough to unload logs.

Q. That is a defect, if the track is not sufficiently elevated?

A. I could not say as to that because I am not a track man.

By Mr. Carey: I want to call the Commission's attention to Great Northern Ex. No. 12, which is a statement showing the number of loaded cars, loaded car miles, &c., during a portion of the calendar year 1919 and two periods of 1920; this exhibit shows that during the calendar year 1919 the total log movement was 14,971 cars, which yielded a revenue of $187,261.71. The Commission reports this an average of $12.50 per car. That is during 1919, prior to the increased rate*d*. During the period September 1 to December 31, 1920, which was after increased rates went into effect, there were 5,779 cars, which yielded a revenue of 97.315, or Seventeen dollars per car, which would seem to indicate that the increased rates as they actually operate have resulted in additional revenue of pretty nearly fifty per cent.

C. McDonough, being first duly sworn as a witness on behalf of the Great Northern Railroad, testified as follows:

Direct examination.

By Mr. Balmer:

Q. In connection with the testimony of the last witness that 1,456 cars were repaired at Delta out of a total of 1,608 logging flats handled into Delta, during the fifty two day period covered by the statement, will you state where from, and in what quantities the cars coming into Delta in the amount of 1,608 cars were handled.

A. Those cars were loaded by the Wallace Falls Timber Company at Gold Bar, and the Sultan Timber & Railway Company at Sultan. There were about 100 cars assigned to Gold Bar service and about fifty cars to the Sultan service.

[fol. 513] Q. Did you make computation as to the expense per loaded car *mila* applicable to the shipments of those two companies on the basis alone of these car repairs?

A. Yes, sir; the statement shows the figures there; I do not remember what they are.

Q. Have you figures?

A. Estimated loaded car miles is 63,444 miles, and the total cost of repairs about $5,278, or an average of eight and three tenths cents per loaded car mile.

Q. In determining that estimate of loaded car mile, first you take the distance from Gold Bar to Detla and applied that to the number of cars of the Sultan Railway and Timber Company that were handled from Gold Bar to Delta?

A. No, cars of Wallace Falls.

Q. State just how you reached the number of estimated loaded car miles.

A. There were 940 car-loads handled from Gold Bar, a distance of thirty miles, and two empty car miles for one loaded car mile is 45 miles per car, or a total of 41,400 loaded car miles for Gold Bar —; for the Sultan logs 668 cars, distance of 22 miles, or including three estimated loaded car miles per car, a total of 22,044 loaded car for Sultan logs, making a total of 63,444 estimated loaded car miles.

Q. Are these logs movements from Sultan and Gold Bar to Delta the principal log movement on the Southernly end of your division?

A. Yes, sir.

Q. That is a main line operation?

A. Yes, sir.

Q. That is the only main line operation you have?

A. Log movement?

Q. Yes.

A. We have one from Monroe to Snohomish, Stevens-Bird logs.

[fol. 514] Q. Where besides these main line operations, is logging business done on the great Northern?

A. Between Rockport and Anacortes.

Q. On the Burlington branch?

A. On the Anacortes-Rockport line.

Q. In connection with accounting department figures that were put in eidence, some criticism seems to be made of the method of estimating expense of moving empty cars as equal to one half the expense of the transportation of loaded cars. I wish as a practical man you would state what your judgment is as to whether the method of estimating the expense of handling two empties as equal to one load is a fair basis.

A. I think it is a fair basis for the reason that it is not physically possible to handle more than two empty cars to one loaded car as a rule. Where you have sufficient empties to make up a solid train, you have the wheel friction to contend with, passing track facilities, passing tracks are not long enough to handle trains of over a certain size or certain length, and another feature is that, taking the log movement for instance, it might be true that you could handle more empty cars than you can loads, but you do not need them. There is no object in having them. If you have thirty loaded cars in one direction it does not do you any good to handle sixty in the opposite direction, and another feature is that you have engines rated to handle certain tonnage economically, and when you have less

tonnage than that your expense is not reduced proportionately to the reduction in tonnage. It takes a certain amount of fuel to move a light engine; you cannot move it without any fuel, and it works up that way until you get the maximum tons. I think all these features enter into it and in some cases I am satisfied that you cannot handle double the empties with the same expense that you can handle half the number of loaded cars. Taking everything into consideration I feel that computing two empties equal to one load is [fol. 515] about as fair as it can be made.

Q. Have you ever had business of logs in exclusive logging trains?

A. Yes, sir.

Q. For what period?

A. I do not remember exact periods; it was prior to September, 1920. I think we had an exclusive train on all last year practically.

Q. Are you running that now?

A. No.

Q. Why not?

A. Not enough business to warrant it.

Q. Not enough tonnage to follow it up?

A. It is the through tonnage as well as logging.

Q. What was the reason of ceasing operation of train with Sultan and Wallace Falls logs on the main line?

A. Well, the camps closed down in the first place and when they resumed, one at a time resumed operations, with the business we had and crews available, we were able to handle the log business in our local freight trains.

Q. Has it been your observation that the empty car movement in log business exceeds the loaded car movement in other business?

A. Yes, sir not any question of that.

Q. What is your observation as an operating man as to the extent of empty car movement in logging flats as compared to other movements?

A. Our statistics show that empty movement in all classes of equipment is approximately thirty-three per cent of loaded movement. total to empty, while log movement is at least fifty per cent.

Q. That is, you move as many empties as you do loads in the logging business?

A. Yes, sir.

[fol. 516] By Commissioner Spinning: Excepting the log movements what would be the present movement?

A. I do not know.

By Mr. Balmer: One of our exhibits shows that.

Cross-examination.

By Mr. Henderson:

Q. Did you prepare or submit the figures that have been submitted in Great Northern Exhibit No. Seven—showing cost of repairing to logging cars as .3824 per loaded car mile?

A. I did not.

Q. You do not know anything about these Great Northern figures already in with reference to that?

A. No, sir, those were prepared by the Accounting Department.

Q. You have nearly three times as much, have you,—over eight cents.

A. Over eight cents for this particular period of fifty-two days.

Q. With reference to movement of empties and loads, how many loads can you pull from Delta to Gold Bar?

A. It depends on the engine and it depends on the weight of the loads.

Q. Well, say logs loaded to the minimum, and take any class of engine you want to?

A. About eighty-five loads.

Q. Just from Delta to Gold Bar?

A. Yes, sir.

Q. With one engine?

A. Yes, sir.

Q. Do you think you could go from Delta to Gold Bar with twenty-five loads as easy as with fifty empties?

A. Yes, sir, I consider it easy.

[fol. 517] By Mr. Calderhead:

Q. I wonder if I understood you correctly that there was a hundred and fifty logging flats assigned to the logging company's service?

A. Yes, sir.

Q. The statement of repairs shows 1,600 cars were repaired in fifty-two days.

A. 1,456.

Q. In fifty-two days.

A. Yes, sir.

Q. That would mean every one of those cars went into repair shop once in five days?

A. Practically.

By Commissioner Cleland: Do you mean 150 cars is all the cars you have?

A. Assigned to this particular movement.

Q. Were the cars that went into this repair shop from these 150?

A. Yes, sir, practically all of them.

By Mr. Balmer: The only cars operated into Delta in this fifty-two day period were those 150 cars assigned to logging companies,—is that right?

A. Yes, sir.

By Mr. Dudley: You made an estimate of Great Northern cost of eight cents per loaded car mile for repairs.

A. Yes, sir.

Q. That includes an allowance for loaded car miles and that is based also on one to two proportion for returned empties?

A. Yes, sir.

Q. Can you make an estimate based simply on loaded car miles, leaving out that empty return?

A. Yes, sir.

Q. What would that be?

(At this point a five-minute recess was taken.)

[fol. 518] A. The answer to your last question is twelve and three-tenths cents.

By Mr. Calderhead:

Q. You heard Mr. Peterson's testimony that two empty cars were considered as one loaded car, that that was approximately correct taking the average load and the weight of the cars. Would you consider the operating expenses upon that basis, considering two empties as one load, if you were handling, or if the rates in question were on commodities handled in refrigerator cars?

A. Do you mean whether that would be a fair basis for refrigerator cars?

Q. Would that be a fair basis or one you would use in calculating freight expense per car mile, if you were considering the cost of moving commodities handled exclusively in refrigerator cars?

A. Well, I do not know as I am in a position to answer.

Q. I do not know as it is a proper question to ask you or not?

A. I have never given any thought to that particularly. I would figure it would be a pretty fair basis. A refrigerator weighs more than other equipment as a rule.

Q. And as a rule commodities do not load as heavy as the refrigerator?

A. Of course there is that feature too of the physical condition surrounding the handling of empty cars.

Q. Well, unless you have given it consideration I presume it would be hardly fair to ask you the question.

By Mr. Balmer: Your position is what?

A. Superintendent, Cascade Division, Great Northern Railway.

Q. You are superior officer to Mr. McCaustland who testified a few moments ago?

A. Yes, sir.

[fol. 519] (Recess.)

(After recess hearing continued.)

Mr. Henderson: We will make the same stipulation with reference to the exhibits of the Milwaukee that we have with reference to the Great Northern, that they may be introduced without the necessity of testimony or the hearing of any witnesses.

The Director: Any objection to that method of introducing these exhibits?

Mr. Welsh: That is satisfactory with the exception that we will take the exhibits as they come along, and if we find any that we want to ask about we will ask the witnesses concerned.

Mr. Dudley: We have a witness here from Chicago at the present time.

Mr. Welsh: I mean we will do it if we need it.

Mr. Dudley: We will call Mr. Vivian.

[fol. 520] GLENN F. VIVIAN, a witness produced on behalf of the Respondent Chicago, Milwaukee & St. Paul Railway Company, after being first duly sworn, testified as follows:

Direct examination.

Mr. Dudley: I desire to offer in evidence under the stipulation, a sheet showing 310 items of railway operating revenues for 1920. These were sent down to the Commission some time ago and I think were distributed at that time.

Mr. Calderhead: I don't think they were distributed except as indicated in your letter.

Mr. Dudley: Well, I served copies upon the other railroad companies directly.

Mr. Carey: I got some of your exhibits and never looked at them and don't know what they are.

Mr. Dudley: We next offer in evidence a sheet showing railway operating expenses for 1920, Item 320-A, consisting of three sheets.

We next desire to offer in evidence a statement 531-B, being statistics of railway operation for 1920, consisting of two sheets.

We next desire to offer in evidence an exhibit showing the freight traffic movement during the year ending December 31, 1920, consisting of two sheets.

The Commission's letter called for additional information with respect to loaded car miles, log road car miles and the number of loaded car miles. That information I have not complete. We have been getting that information from the various station agents, and [fol. 521] up until Saturday there were two or three stations missing, we didn't get them from Chicago. I left the other copies at my room, of this Exhibit. I thought they had been sent down. We offer in evidence statement of Intra and Inter-state shipments revenue freight carried, in the State of Washington for the years 1919 and 1920, being one of the Exhibits requested by the Commission.

Mr. Dudley:

Q. Now Mr. Vivian, in making up your gross ton mile accounts as shown on these sheets you have produced, from where did you get your information?

A. The Exhibit 18, which shows the total railway operating expenses for the State of Washington, are obtained from reports rendered by the Division Superintendents. At the present time reports are being received showing the operating expenses divided between freight and passenger, as far as the division is able to do so, and we are now working on a formula to pro rate those expenses between states. For

the year 1920 the division allocated to the states as far as possible all expenses within the state, and the remainder are prorated on various bases.

Q. Well you get your items from which you make your gross ton most of operation from the Conductors' wheel reports?

A. Well not exactly. We may in some cases use gross ton miles as a basis for separation, but the majority of our expenses that are common and apportioned are apportioned on the basis of transportation train miles——

Q. But where you do say gross ton miles where do you get your basic data from?

A. From the Conductors' wheel reports.

[fol. 522] Q. Your system of bookkeeping is that prescribed by the Interstate Commerce Commission's regulations?

A. Yes sir.

Q. And all this data pertaining to the books is carried on in that manner?

A. Yes sir.

Mr. Dudley: I think that is all.

Mr. Henderson: No questions.

The Director: Anyone desire to cross-examine this witness? He has been brought out here from Chicago for that purpose.

Mr. Henderson: I think I stated before he came out here that I didn't care to cross-examine—before he was sent for.

Mr. Dudley: I will call Mr. Greengard—I understand this case will not be closed today anyway—some additional data which was called for by the Commission, which we think in fairness is due to the Commission, is not complete. Now I can call the witness and identify it as far as he has gone. He says that he has with him only one copy. I can send to my room and have them brought down, and it will take but a few moments to identify them.

Mr. Henderson: I would like to close up today if we can.

Mr. Dudley: That will be all we have for the present.

The Director: Does that conclude the testimony of the carriers?

Mr. da Ponte: Except as I stated when I closed my case.

The Director: You may proceed.

Mr. Henderson: We will call Mr. Gray.

[fol. 523] HENRY L. GRAY, a witness produced on behalf of the Loggers Association, after being first duly sworn, testified as follows:

Direct examination.

Mr. Henderson:

Q. Your name is Henry L. Gray?

A. Yes.

Q. And your occupation?

A. I am an engineer.

Q. And how long have you been in that business?
A. About 20 years.
Q. You were with the Commission when it was first organized were you, as engineer for the Commission?
A. Yes.
Q. And you have followed that business for 20 years continually, have you?
A. Yes sir.
Q. Have you examined the Exhibits introduced at the hearing prior to the one that was resumed yesterday morning, and many of the figures that have been submitted at this hearing?
A. Yes, I have examined all of the Exhibits submitted at the hearing of April 11th to 13th, and have supplemented those figures by other data submitted by the carriers since that time.
Q. And have you prepared some exhibits of your own analyzing these exhibits and the annual reports and traffic reports of the various carriers?
A. Yes.
Q. And have you those in exhibit form?
A. Yes, I have a few of them left. I prepared 25 copies in the aggregate and most of them have been distributed.
[fol. 524] Q. The Commission have three?
A. The Commission and its staff have five copies.
Q. Have you prepared your exhibits in what might be termed book form, consisting of six pages?
A. I am not sure about the six pages. I have prepared them in book form. Yes, there are six pages contained therein.
Q. I would like to have that book marked as one exhibit as shown there. They can go into the record I think in that shape better than in individual sheets, because they are all tacked together.

The Director: Yes.
Mr Henderson: And that will be Log Shippers No. 1.

A. Each sheet in the bound pamphlet is marked with an Exhibit number. I think perhaps you had better refer to this as Exhibits 1 to 5, including an extra exhibit, being 3-A, being 6 exhibits in all. Each exhibit is numbered.
The Director: Exhibits 1 to 5 and 3-A?
A. Yes sir.
Mr. Henderson: Now taking up Exhibit No. 1 Mr. Gray, will you explain that to the Commission?
A. Exhibit No. 1 shows the comparative unit revenues from freight traffic during 1919; the comparison being between the system unit revenues and the state unit revenues, upon the basis of 1,000 Revenue Net Ton Miles. The reason I didn't use the year 1920 instead of 1919 was because I had no figures for 1920. These figures were all taken from the annual reports made by the carriers to the Public Service Commission.
Mr. da Ponte: Those are the ones stipulated to be put in evidence?

Mr. Henderson: Yes, and at that time there was not available, either from the figures in hearing or anywhere else, the figures for [fol. 525] 1920?

A. There were figures available so far as the state was concerned but they were incomplete. The Great Northern didn't complete its data until about 30 minutes ago. The three other carriers submitted theirs some time ago.

Q. Now why did you use the 1,000 revenue net ton mile as a unit?

A. In order to avoid an unusual number of decimal places. The unit is the net ton mile and I used 1,000 net ton miles in order to make the figures stand out somewhat clearer.

Q. Well, the exhibit explains itself otherwise?

A. The exhibit explains itself, and shows conclusively that the revenues of each of the carriers for the year 1919 was greater for 1,000 net ton miles in the State of Washington than on the system as a whole. Now let me check that statement. That statement is correct.

Q. Now I notice you have it divided into freight transportation revenue and freight service revenue. For the purpose of the record will you explain the difference between those two?

A. The freight transportation revenue indicates the revenue shown in account 101, which is simply revenue from the transportation of freight. The freight service revenue includes several other accounts incident to the freight business, such as switching, demurrage, storage of freight, and miscellaneous items, being accounts 101, 109, 110, 112, 135, 137, 139 and 140.

Q. And those account numbers refer to the classification as prescribed by this Commission?

A. By this Commission and by the Interstate Commerce Commission.

[fol. 526] Mr. da Ponte: Are they still carried in the reports?

A. They are all carried in the annual reports, and your accounting officials will know these numbers readily, and can identify them.

Mr. da Ponte: These are annual reports to the Department?

A. Yes they are annual reports to the Department, which correspond, as far as account numbers are concerned, to the Interstate Commerce Commission.

Mr Henderson: Is there anything else about that exhibit that you desire to explain.

A. Nothing; it was prepared for the specific purpose of showing that the revenue per 1,000 ton miles from the State of Washington was greater than from the system as a whole.

Supervisor Cleland: That is, gross revenue?

A. Yes sir, gross revenue.

Supervisor Cleland: No deductions whatever?

A. No deductions whatever.

Mr. Henderson: Now taking Exhibit No. 2, explain to the Commission what that is for and where you got your figures, and whatever explanation you may think there should be.

A. Exhibit No. 2 was prepared to give the Commission a gen-

eral idea of the log traffic movement within the State of Washington.

Q. And for what year is this?

A. This covers the year 1920. There are a number of notes upon this particular exhibit. The first note should not be there at all, and if we will all strike out that first note reading "The first period mentioned above etc." Strike it first and I will explain how it happened to get in there. I will state that this table was first made up showing the statistics for 1920 during the period prior to the in-
[fol. 527] crease in rates as compared with the period subsequent to the increase in rates. I would have shown both periods in this tabulation but I couldn't get a typewriter big enough to type it, so I condensed it, and it shows the year as a whole, and in some manner this note which was on the original pencil copy got on this sheet. All of the figures relating to the number of loaded cars is shown by Item 1, and the total board feet hauled is shown by line 2; they were taken directly from the carrier's exhibits, with the exception of the case of the Milwaukee which had not and possibly still has not submitted any data relative to the log transportation for the year 1920. Consequently I was forced to substitute in the case of the Milwaukee their figures submitted for the year 1919. The total tonnage shown on line 3 was computed upon the basis of 8,300 lbs. per 1,000 board feet.

Mr. da Ponte: 8,300 lbs.

A. Yes sir, 8,300 lbs., which was arrived at by weighting and averaging the exhibits submitted by the carriers at the last hearing; the Northern Pacific having weighed 300 cars, the Milwaukee having weighed 149 cars, the O. W. R. & N. having weighed 10 cars, and I weighed and averaged those weights and arrived at a figure of 8,300 lbs., and that is the figure which I have used throughout all of the calculations. The total loaded car miles were given in some instances and were computed in others. By computing I mean, that in cases where the loaded car mileage was not given the point of origin and the point of destination and the distance of the particular shipments were given, and in that manner I computed the loaded car miles. The total freight bill, as shown by line 5, in every case except the Milwaukee, was taken directly from the carriers' exhibits. In the case of the Milwaukee the total freight bill was arrived at by taking the Milwaukee revenues as shown for the year to September
[fol. 528] 1st, and taking the Milwaukee's revenues as shown following September 1st, and increasing it by 25%, that being the increase in the log rate of August 26th. Is that clear to everybody? I might add also——

Mr. Capron: You split 1919?

A. The Milwaukee showed its shipments month by month; it was no trouble to do that.

Mr. Capron: For 1919?

A. Yes, for 1919. All of the Milwaukee shipments—or all of the Milwaukee's data relative to log shipments is based upon their exhibits covering the year 1919, and all of their dat-s are shown by

months for the year 1919; so I simply took the last four months, September, October, November and December, took the revenues shown and increased it by 25%; and in that only the revenues for the Milwaukee are shown. Now I might add further, that the Northern Pacific in its exhibit showed only eleven months of the year 1920, and I was forced to estimate the additional month of December, which I did, by taking the months of September, October and November, and taking one-third of the shipments for those months and adding it in.

Mr. da Ponte: We submitted that data for December about a month ago.

A. It has never reached me.

Mr. da Ponte: It was sent to the Commission.

Mr. Henderson: We tried to get it I know.

A. I was very sorry that I could not have gotten all of these statements because I would have made these figures absolutely exact.

Mr. da Ponte: That December, which you took from one-third of September, October and November—the December receipts are out [fol. 529] of the way; it don't run that high.

A. Well, in the first place I don't concede that the estimate for the month of December would have any material effect on the Northern Pacific figures, consequently I tried very diligently to get the Northern Pacific figures but was unable to do so.

Mr. da Ponte: You never asked me for it. It was simply an oversight if it was not sent to you.

Supervisor Spinning: Did you get it Mr. Calderhead?

Mr. Calderhead: I don't know.

A. (Continuing:) Well, be that as it may, the assumption of the Northern Pacific figures for the one month of 1920, would not affect it. If you would eliminate it altogether it would not materially affect these figures.

Mr. da Ponte: I can give you the exact figure.

A. All right, let's have it.

Mr. Capron: What is the figure that you estimate?

A. We will check them right down the line. I have the whole Northern Pacific——

Mr. Capron: I mean just for one month?

A. I don't recall, it has varied in these years.

Supervisor Spinning: You have the totals, and then you can take the difference between the totals——

Mr. Henderson: Let's go ahead with that and let them get that total figure to show how much difference there is.

A. Line 6, board feet per loaded car, is simply a process of division. In fact all of the figures following line 5, with the exception of line 9 are obtained by division of the preceding figures. For instance line 6, board feet per loaded car, is arrived at by divid-

[fol. 530] ing line 2 by line 1. Line 7, showing net tons per loaded car, was arrived at by dividing line 3 by line 1. Line 8, average haul per loaded car, was arrived at by dividing line 4 by line 1. Line 9 is of no particular significance, except that I thought somebody might want to know. Line 9 shows the straight average of the loaded hauls. It was arrived at by taking each particular haul, that is, taking all of the specific hauls in miles, putting them together and dividing them by the number of hauls. In other words it was simply straight average, and it is a rather peculiar thing that it does not depart very much from the weighted average. It is not significant however. Line 10, revenue per loaded car, was arrived at by dividing line 5 by line 1. Line 11, revenue per M board feet, was arrived at by div-ing line 5 by line 2. Line 12, revenue per loaded car mile, was arrived at by dividing line 8 by line 4. And line 13, revenue per net ton mile, was arrived at first by dividing line 5 by line 12, and then dividing the result by line 7, which shows the tons. First you get the loaded cars and then you get the number of tons on the car and make your division, and in that way you get line 13. There are some notes at the bottom of the table which I think are self explanatory. I tried to put my explanations in these notes.

Mr. Henderson: Now right opposite these figures for the Northern Pacific have you 1920, the actual figures, so we will see what difference it makes?

Mr. Capron: You were talking about line 4?

A. Begin at line 1, how many loaded cars did you haul in 1920. Your testimony on the stand previously was 105,000 cars.

Mr. da Ponte: You will have to take that right from the exhibit [fol. 531] before us.

Mr. Capron: Yes, we have it here.

Mr. Henderson: We would like to have this knowledge because we didn' thave it the other time, and we wuld like to see if there is any difference.

A. I would like to know what the actual figures are if it is possible. Someone has remarked that these figures were different.

The Director: Who has these figures?

Mr. Capron: I have.

The Director: Read them.

Mr. Capron: Number of loaded car miles 101,725.

Mr. Calderhead: What exhibit are you reading from?

Mr. Capron: I am reading from a memorandum here. The Exhibit is supposed to be our Special 190. I don't know what exhibit number was given to it.

The Director: 101,725?

A. Now, then, your total board feet in thousands——

Mr. Capron: We didn't figure that.

A. Well, then, your net tonnage?

Mr. Capron: 3,245,878.

A. Well, lets go ahead, lets get the total loaded car miles now?

Mr. Capron: 3,186,780.

A. Now what did you say your total revenue was?

Mr. Capron: $1,308,875.32.

A. All right. Now the rest are all simple divisions, and my prediction is, without dividing it, that you won't change my resulting figures very much.

Mr. Capron: Now I want to explain, those net ton figures that I read won't work out exactly in every case, because the auditor didn't [fol. 532] use this 8,325 that we determined to be the correct average.

A. According to my previous figure the revenue per car, which is very significant was shown to be $12.95, according to the revised figures the revenue should have been $12.85. Now that indicates about how much the actual figures would change the results of this table.

Mr. Henderson: And the revenue per ton per mile would not be changed so that you could find it?

A. The difference is so small it would probably be out about the sixth or seventh decimal place.

Q. Would you prefer to have them interrogate you as to the exhibits as you go along?

A. I would much prefer to be interrogated as we go along.

Mr. Henderson: If there is no objection on the part of the Department we would prefer to have it that way, because it will make it much plainer.

Mr. Dudley: Turn to Exhibit No. 2, we have been unable to find where you got your figures in the number one column for the Milwaukee?

A. You can find that by adding up the figures which you submitted in your Milwaukee Exhibit No. 2 on the hearing of April 11th-13th.

Mr. Dudley: We added them up, and according to our memorandum you can't get within 2,000 cars. What figures did you use?

A. I used the figures shown on your exhibit.

Q. We can't find it.

A. Of course we are all prone to error and I might have made a mistake.

Q. I have added up those figures for the Milwaukee and find it [fol. 533] different 2,000 cars.

A. I will re-add the figures and if I find I am in error I will be glad to notify you and the Commission.

Mr. Dudley: Well, take those figures on this Exhibit, with the exception of the 4th item we are unable to work out from our previous exhibit. The 4th item is from our previous exhibit, that $2,304,545?

A. Yes.

Q. In your note at the bottom you say it was taken from the figures in Exhibit No. 2. I don't know what exhibit you refer to.

A. Let me give you Exhibit No. 2, and take a look at it.

Mr. Henderson: These figures for the Milwaukee are largely estimates anyhow, aren't they, the figures that he refers to?

A. Well, I am not so sure about that.

Mr. Dudley: They were base on the 1919 tonnage and estimated to that extent. You worked it out from the 1919 tonnage on the assumption that the 1920 tonnage was the same?

A. Yes.

Mr. Dudley: So to that extent they are estimates?

A. Yes, to that extent they are estimates. Now apparently in some manner that reference to the exhibit number is incorrect. The exhibit number is No. 7 instead of number 2.

Mr. Dudley: I will tell you, to save time, all I want is to simply get these figures properly. I can take that up with you in Seattle just as well, and find out where these figures came from; but I would say that at the present time we are unable to find but one of the figures.

A. I will be very glad to correct them.

[fol. 534] Mr. Dudley: Well we'll let it go that way and take it up later.

A. For example what do you make your total number of cars?

Mr. Dudley: As I remember now we had about 91,000.

A. Therefore your revenues per unit would be somewhat greater than the figures you have shown——

Mr. Dudley: Well, your revenues are partly based upon the number of cars?

A. The revenues are shown in dollars and cents on your exhibits.

Mr. Dudley: But not the tonnage?

A. The tonnage is not shown but the revenue is shown.

Mr. Dudley: Well, and this being the number of cars it would show a greater return per car but not per ton?

A. Yes sir. As a matter of fact I think your revenues shown on your exhibit is way too low, because you have figured that no car would be loaded with more than the minimum.

Mr. Dudley: That was true of the 1919 exhibit, and the other exhibit we are preparing shows the actual revenues. I think it will reduce it somewhat.

A. In order to show that I tried to be fair with the Milwaukee, you will notice that the Milwaukee revenue per car is only $9.86.

Mr. Dudley: We don't question your fairness, only we couldn't get the figures straight. I will get that from you later.

Mr. Henderson: Is there anything else on Exhibit No. 2, as to cross-examination, if not we will go to Exhibit No. 3.

A. Exhibit No. 3 shows comparative freight revenues, logs and [fol. 535] other commodities, state of Washington, 1920. Now you must bear in mind that throughout all these exhibits they will be affected somewhat in many instances by the fact that I was forced to substitute the 1919 figures for the Milwaukee, which might result in a substantial difference in the case of the Milwaukee, but I have been forced to use an estimate for the one month's period in the

case of the Northern Pacific, which will not materially affect it much——

Mr. Henderson: That will not materially affect the result?

A. No. On line 1 is shown the total revenue from transportation of intrastate freight other than logs. That figure was arrived at by taking the revenue from intrastate freight, as reported to the Public Service Commission, and deducting therefrom the revenue from logs; with the single exception that in the case of the Great Northern, having no statistics whatever in regard to earnings and operating expenses I was obliged to take it from the 1919 figures, which I increased in exactly the same percentage of increase as had occurred in the case of the Northern Pacific. In other words I estimated that the Great Northern's earnings and expenses were increased in the same ratio as had the Northern Pacific's earnings and expenses, and apply that ratio of increase. Line 2, total revenue from transportation of intrastate log shipments, that is taken from Exhibit No. 2, and that has been explained. Line 3, Total revenue from transportation of intrastate freight, that represents the sum of lines 1 and 2. Line 4, total revenue from transportation of interstate freight, that is taken from the reports to the Public Service Commission. Line 5, total revenue from transportation of freight other than intrastate logs, that includes both intrastate and interstate, as reported to the Commission, less the log revenue. Now those are the basic figures. [fol. 536] All the figures shown on lines 1 to 5, inclusive, are to be divided by the figures shown on line- 6 to 10 inclusive. Line 6 shows the revenue ton miles of intrastate freight other than logs, taken mostly from reports to the Commission. The revenue ton miles of intrastate log shipments were taken from the Carriers' Exhibits. Line 8 is the sum of Lines 6 and 7. Line 9 was taken from reports to the Public Service Commission, also with the deduction for logs.

Mr. da Ponte: What did you say about line 8?

A. Line 8, Revenue ton miles, total intrastate freight, is the total of lines 6 and 7.

Q. And that was obtained where?

A. It was obtained from the reports to the Public Service Commission, with the exception of the Great Northern.

Mr. Calderhead: Lines 6 and 7 were rather taken from the exhibits, weren't they Mr. Gray?

A. Line 6 was taken from the report Mr. Calderhead, that is the total revenue ton miles of intrastate freight other than logs. Line 7 was taken from the Exhibit.

Mr. Henderson: When did you give the carriers copies of these exhibits?

A. They were mailed from my office in Seattle last Friday night.

Q. Now you may proceed with line 10, down through the rest of it.

A. Line 10, as I explained, was taken from reports to the Public Service Commission, and from which was deducted log ton miles as calculated from the Carriers' Exhibit. Lines 11, 12, 13, 14 and 15 represent the results obtained by dividing lines 1 to 15 inclusive by [fol. 537] lines 6 to 10 inclusive. In other words they show the

unit revenues. This was for the purpose of showing the comparative unit revenue of logs and other traffic within the state. Now before I go any farther I will say that I think perhaps I can answer Mr. da Ponte's question, as to the number of intrastate ton miles?

Mr. da Ponte: Revenue ton miles.

A. Total intrastate freight? That figure Mr. da Ponte is an estimated figure purely. The reports to the Commission show, so far as revenues are concerned, the revenue from intrastate freight and the revenue from interstate freight. I have those two revenues set out clearly. Now I wanted to find out about how much money the carriers got from the intrastate haul and from the interstate haul, but in the case of the Northern Pacific, the Great Northern and the Milwaukee, I didn't know what part of the revenue ton miles related to the intrastate business and what part to the interstate business. In the case of the O. W. R. & N. I did know. They furnished me the figures. So I was forced to estimate the percentage of intrastate and interstate ton miles as shown, and I did that on the basis of the study made by Mr. Calderhead for the Railroad Commission of Washington in 1906, at which, as I recall it, he put in almost a year in arriving at the relative percentages. The percentages were admitted and accepted by the Carriers at that time without question. It shows that of the total business within the State of Washington the total revenue ton miles for the Northern Pacific were 40% intrastate, and, (in the case of the Great Northern 35%) and that 60% was interstate. Now the Great Northern figures show that today that figure has shrunk in its value 18%. In other words as compared with the 1906 ton miles the intrastate has been cut half in two as compared with the interstate. I am not in a position to ques- [fol. 538] the Carriers' figures. It looks a little odd. The significant figures in Exhibit No. 3 are those shown on line 12, which shows the revenue per thousand ton miles of intrastate log shipments is $12.01 in the case of the Northern Pacific, $17.07 in the case of the Great Northern (which figure may change because I was forced to estimate the Great Northern's earnings); $14.81 in the case of the Milwaukee, and $24.74 in the case of the O. W. R. & N.

Mr. Henderson: The grand total shows that the revenue per 1,000 ton miles of intrastate log shipments is larger than the revenue per 1,000 ton miles of intrastate freight other than logs, is that correct?

A. Yes sir, and so this table shows.

Mr. Dudley: Does that apply to all Carriers?

Mr. Henderson: That refers to all Carriers except the Northern Pacific?

A. Yes, except the Northern Pacific. The Northern Pacific shows that they get more per 1,000 ton miles of intrastate freight other than logs than they do from intrastate log shipments.

Q. All the other Carriers get more from the log shipments?

A. Yes. But bear in mind that if Mr. Balmer's Exhibit is correct and his percentage of intrastate ton miles is only 18% instead of 35%, which I used, his revenue per 1,000 ton miles of intrastate freight other than logs would almost double that.

Mr. Henderson: Now you have explained, have you here, in that foot note the figures you used to get the percentage of intrastate ton miles?

A. Yes sir.

Q. And that was obtained from the figures which have been approved by this Commission heretofore?

A. Yes sir, except in the case of the Milwaukee. I had absolutely [fol. 539] no information concerning the percentage of intrastate ton miles in the case of the Milwaukee, so I assumed it was the same as the Great Northern. I may or may not be correct.

Mr. Balmer: Could you give us a reference to the proceedings in which that estimate was made?

A. It is the findings of the Commission.

Mr. Calderhead: That was not an estimate.

Mr. da Ponte: That was made in 1908; that is where it will be found.

A. There are two lines on Exhibit No. 3 which will not vary and which will not change in any way with the assumptions I have made regarding the percentages of intrastate and interstate ton miles. Those are line 12, which shows the revenue per 1,000 ton miles from log shipments, and line 15, which shows the revenue per thousand ton miles of all freight other than logs,—other than intrastate logs. In other words, the revenue of all four Carriers per 1,000 ton miles from log shipments, was $13.84; whereas the total revenue within the state excluding logs was $11.48.

Mr. Balmer: Pardon the interruption again, but any of the figures that are involved in that valuation case are about as obscure, in so far as finding them is concerned, as anything existent. Is there any particular place we can be referred to where that study of yours can be found, Mr. Calderhead. Is it stated in any findings anywhere, or is there an exhibit we can get?

Mr. Calderhead: There was a printed copy of the testimony, so far as the Great Northern railroad was concerned, submitted to your company in that case. I believe I have an extra copy, possibly, of that testimony which I would be glad to give you.

Mr. da Ponte: Do you mean by testimony all of the findings?

Mr. Calderhead: All of the testimony upon which the findings [fol. 540] were based, so that you would have all of the details necessary there.

Mr. Henderson: And you can furnish a copy of the findings can you?

Mr Calderhead: They have been out of print for a year or two.

Mr. da Ponte: I am the only man alive that has a copy.

Mr. Balmer: I believe you are the only man that can understand it.

A. Now bear in mind that following through the exhibit that Exhibit No. 1 shows that the traffic within the state provides a greater unit revenue than the revenue on the system, per 1,000 ton miles.

Exhibit No. 3 shows that the revenue from logs provides a greater revenue than any other in the state.

Q. Irrespective of the estimates?

A. Irrespective of the estimates, except the estimates I was forced to make in regard to the Milwaukee on account of lack of data, and the Great Northern——

Q. That would be irrespective of your assumptions as to intrastate traffic or interstate?

A. They would have nothing whatever to do with it.

Mr. da Ponte: You assumed that the Northern Pacific revenue ton miles intrastate was $655,744,691.00?

A. Yes, sir.

Q. And the revenue ton miles interstate was $983,617,073?

A. Yes, sir.

Q. And that was an arbitrary division that you made on the basis of the findings of fact made in a valuation case of the old Railroad Commission in 1908?

A. Yes, but not exactly so crude as that. I came down and con- [fol. 541] sulted with the Commission's traffic expert regarding the possibilities of material changes in those things.

Mr. da Ponte: If, as a matter of fact that percentage is incorrect, why then your figures are incorrect?

A. Exactly.

Q. And you don't know what the percentages were in 1918, 1919 or 1920?

A. I do not.

Mr. Henderson: Will you indicate in that exhibit the lines in which we will find the figures that will be affected by your using 35% and the 40% for the division——

Mr. da Ponte: Now those lines I have just referred to are lines 8 and 9?

A. Yes, the lines which will be affected by the assumption regarding the relation between the intrastate revenue ton miles within the State of Washington are lines 8 and 9 and lines 13 and 14.

Q. Those will be affected?

A. Yes, sir.

Q. Now did you attempt to get from the Carriers the segregation between state and interstate?

A. Quite a while ago.

Q. And letters were writen trying to get them?

A. Yes, sir.

Q. Did you ever get any information?

Mr. da Ponte: Just wait a minute. We furnished everything that the Commission asked for in any letters we ever got, and let's settle that between us without encumbering the record.

Mr. Henderson: All right, the record will show.

[fol. 542] Mr. da Ponte: I will leave it to Mr. Calderhead that we furnished everything requested by this Commission?

Mr. Calderhead: I couldn't tell you.

Mr. da Ponte: Didn't you check them up——

Mr. Calderhead: No——

Mr. da Ponte: Did you care so little for this information?

Mr Calderhead: I don't know that you did——

Mr. da Ponte: All right, I am under oath to say that we did.

Mr. Calderhead: I don't know whether these figures were ever asked for.

Mr. da Ponte: You were just asking for random figures according to that?

A. I might say that the O. W. R. & N. apparently understood what was wanted and furnished the figures without any trouble about it——

Mr. Henderson: I will state that before we adjourned at the last hearing the Commission asked what figures we wanted, and I stated that we wanted a division of the revenue ton miles within the state between intrastate and interstate traffic exactly——

Mr. da Ponte: Let me see the list of stuff you wanted?

Mr. Henderson: I haven't it.

Mr. da Ponte: At any rate that is aside from the question. We can't be estopped——

Supervisor Spinning: Have you been refused information that you requested?

Mr. da Ponte: No

Mr. Henderson: Was the information with reference to the division of revenue ton miles within the state between intra and interstate traffic ever furnished you?

A. Never, with the exception of the O. W. R. & N.

[fol. 543] Q. And you visited the Commission to see if it had been furnished to the Commission?

A. Well I wouldn't like to say that I did for that particular purpose, but I was constantly in touch with the Commission in regard to what was coming in, because I had no other way of getting it except through the Commission, and my understanding was that it never came to the Commission, and I do know that as quickly as it came from the O. W. R. & N. I very promptly was furnished with a copy of it.

Mr. Calderhead: I can easily check up the letter that was addressed to the carriers to see whether that information was requested, and I will say further that Mr. Gray is right, that he was furnished with the information as fast as it came from the carriers.

Mr. da Ponte: Now Mr. Calderhead I was protesting against being put in the light of having refused any information requested. We have gone to a very great expense in an effort to furnish everything that the Commission requested.

Mr. Colderhead: You probably have; have you a copy of that request with you.

Mr. da Ponte: No, I have not.

Mr. Henderson: The record will speak for itself and will show that the gentleman said that he was under no obligation to furnish anything to anybody except on the order of the Commission, and the

record will also show that before the last hearing was closed we requested that we be furnished with this information.

Mr. da Ponte: Let the record speak for itself.

Mr. Dudley: Did you write any letters to the Milwaukee people?

A. No sir.

[fol. 544] Mr. da Ponte: You don't say that you asked us for anything?

A. No sir.

Mr. da Ponte: So it restricts itself to the letter which Mr. Calderhead wrote, and that will show what was requested, and we maintain we furnished every single item except those contracts with these two logging companied, and I have those, but they were so voluminous that I dodn't copy them——

A. With the exception of the log traffic for 1920 which you could probably furnish in about half an hour.

Mr. da Ponte: We will furnish that too. We have a tremendous amount of stuff, but it was not purposely withheld.

Mr. Henderson: I will ask you if on April 13th you didn't request of the commission that you be furnished with this information?

A. Yes, I think so.

Mr. Balmer: I think it is awfully tedious. I could order stuff here too——

Mr. Henderson: You are finding fault with our using that figure and I am trying to show where we got it. Any other questions with reference to Exhibit No. 3?

Mr. da Ponte: Now your figures beginning with line 11, "Revenue per 1,000 ton miles of Intrastate Freight, other than Logs" and then a similar item in Line 12 as to Intrastate Log Shipments, etc., shows the revenue received per 1,000 ton miles for moving that traffic, gross revenue?

A. Gross, yes.

Q. Without regard to expense?

A. With no regard whatever to expenses.

[fol. 545] Q. Now your revenue per 1,000 ton miles of interstate freight shown in Line 14, $11.51, is the gross receipts of interstate traffic; that is Washington's proportion of the interstate business as shown by the reports to the Department of Public Works?

A. No, not exactly. I had your gross revenue from interstate freight within the state but I didn't have your interstate revenue ton miles, so I had to assume that.

Q. I see. So then you divided the total revenue as shown by the report to the department of Public Works by your estimated number of interstate ton miles?

A. Exactly.

Q. Which you estimated to be about 40%, as above explained?

A. Well, 60% of interstate.

Q. Now that figure is also the gross receipts and takes no account of expenses?

A. Yes.

Q. So there is nothing in this Exhibit which shows what the actual net return to the carrier was from these two classes of business?

A. No, this exhibit is purely for the purpose of showing that the revenue per 1,000 gross ton miles from logs in the State of Washington is greater than the revenue per 1,000 gross ton miles from other traffic.

Q. Now you offer it as a traffic expert, so that a question like this would be fair, and I will ask you the question and see if you will be permitted to answer it under this kind of examination: Do you undertake to say that a comparison between the gross receipts from any given kind or class of traffic has any reference to what the [fol. 546] net returns to the carrier would be from that traffic which is applicable to taxes and dividends, that is, what the carrier is going to have left after paying his out of pocket costs?

A. Can I answer that question this way, to say, that there is apparently nothing on this sheet to show that the carrier made any profit on any class of freight.

Q. What I want to ask is, whether you take this as indicating that a comparison between the gross receipts of state and interstate traffic has any relation to what the profits to the carrier are from handling that traffic?

A. No.

Mr. da Ponte: That is all.

The Director: In Line 12, showing the Revenue per 1,000 ton miles of Intrastate Log Shipments, how do you arrive at the last figure in the last column?

A. The figure corresponding to Line 12 in the last column was arrived at by dividing the total shown by line 2 in the last column by the total shown by line 7 in the last column. In other words I have divided $2,801,720.00 by $202,378,192.00, Revenue Ton Miles, which should give you $13.84.

The Director: Couldn't that be arrived at by taking the revenue of each of the carriers and adding those together and dividing by the number of carriers?

A. That would give you a straight average but I think it might possibly destroy the average revenue. I think it would be better to use the weighted average, which I have used; although you could use the simple straight average, if you simply wanted the straight——

Mr. Carey: That, however, would not reflect the different volumes of traffic——

A. No.

[fol. 547] Mr. da Ponte: Any error between state and interstate, in lines 8 and 9, would be reflected in line 15 as well as in lines 13 and 14?

A. It couldn't possibly be reflected in Line 15. That is—Now I am making that statement a little positive. If Mr. Peterson really knows and will show me I will be glad to back up if I am wrong?

Mr. Peterson: The idea is this: We have here $655,000,000, that is the amount you show that is based on 40%?

A. Yes.

Mr. Peterson: Now by actual percentage the Northern Pacific was 27.42 instead of 40, and the result will be a considerable decrease, and if you decrease that you will have to decrease your interstate, which will change the figures.

A. It will change some of the figures Mr. Peterson but not the figure in Line 15——

Mr. Peterson: That is the "Revenue per 1,000 Ton Miles of all Freight other than Intrastate Logs?" Oh, yes, I see.

A. It will not affect either line 12 or line 15.

Mr. Dudley: Instead of revenue ton miles you use the net ton miles?

A. Yes, the net ton miles. You don't report the revenue ton miles except for your own convenience.

Mr. da Ponte: So that omission would affect the average result as applied to the particular traffic in which the empty and loaded car mileage might fall?

A. I don't get that?

[fol. 548] Mr. da Ponte: I say, using the net ton instead of the gross ton basis would make the average figure inapplicable to any particular kind of traffic that was used in which the empty car mileage might be greater than the loaded?

A. I don't understand you but when you want to figure the unit revenues you don't figure the gross ton miles but the net tons, that is what you get your revenues from.

Mr. da Ponte: I understand, but it would affect the proportion of operating costs?

A. I have not suggested anything about operating costs. When you get over to this you will find I have used the gross tons.

Mr. da Ponte: All right.

Mr. Henderson: All right, take up the next Exhibit, which is 3-A.

A. The Exhibit 3-A was compiled from data furnished me by the Interstate Commerce Commission, which shows the 1920 operating costs per 1,000 gross ton miles within the State of Washington. The figures relating to the system were furnished to me by the Interstate Commerce Commission. The figures relating to the State were taken from the advance sheets of the 1920 reports to the Public Service Commission, except in the case of the Great Northern, which was again estimated. These figures show that in every instance that the total operating costs as apportioned to the State of Washington is considerably greater than the corresponding unit operating costs reported for the system. In other words, on an average for 1,000 gross ton miles the operating costs assigned to the State of Wash-
[fol. 549] ington is almost 50% in excess of the operating costs assigned to the system. I can't understand it. I can't see why the State of Washington should be burdened with such a tremendous proportion of the operating expenses of these carriers.

Mr. da Ponte: $4.23 against $5.51, as I understand it?

A. You are referring to your road only. I am referring to it as a whole.

Mr. da Ponte: Oh, you are not charging us up with it?

A. I will give you the exact difference and see what it is.

Mr. da Ponte: The Great Northern is higher?

A. Yes. Well, I was in error about the 50%; the exact percentage is 37.4.

Mr. da Ponte: For the whole?

A. For the four carriers combined. Now admitting the possibility of an eror in the case of the Great Northern, where I was obliged to take the estimated expenses, there can be no errors between all the other carriers. Those figures came from very accurate sources.

Mr. Dudley: Don't you think that the excessive cost within the State of Washington may be due to the extra expense of handling logs?

A. I would like to take that under consideration.

Mr. Balmer: Well, leaving that aside, you would expect to find some higher costs in the State of Washington than on other parts of these systems, wouldn't you?

A. Well, I don't know now, whether I would or not. I don't know that I would expect to find any such differennce as that at any rate.

Mr. da Ponte: As what?

A. As 37% excess.

[fol. 550] Mr. Balmer: Well, taking the ratio of difference, wouldn't you, from your residence here in the State of Washington, and from your experience as a civil engineer, and from your knowledge and acquaintance with conditions on these lines here in the State of Washington, wouldn't you expect to find a higher cost of operation on the lines in the State of Washington than east of this state?

A. I could answer your question perhaps more definitely if I knew more about the systems as a whole. I don't believe I would care to answer the question.

Q. Well, do you know any place on any of the lines east of the State of Washington where so much money has been expended for snow sheds as on the Great Northern mountain line in Washington?

A. No, I don't know, but why should the O. W. R. & N. have an operating cost of $6.61 in the State of Washington and only $5.43 for the system. There is no great difference between Oregon and Washington.

Mr. Henderson: If there is it is in favor of Washington?

A. On the O. W. R. & N. yes, it is in favor of Washington.

Mr. Henderson: I might state that I intend to call Mr. Calderhead and ask him to give us his ideas of what a proper explanation of this is, later on

A. Now bear in mind that the exhibits show that the revenues in the State of Washington are greater than the revenues from the system, per unit, and that at the same time the State of Washington on the expense basis is assessed 37% of the operating expenses in excess of the unit operating expenses of the system.

[fol. 551] Mr. Henderson: Although yielding a greater revenue per 1,000 ton miles?

A. Yes. I don't know that there is any relation but those are the figures.

Mr. da Ponte: Now you keep using 37 and 33%. Last time you used 37. Do you mean——

A. I think I said 37.4%.

Mr. da Ponte: I think you said 33. Let's get it straightened out?

A. 37.4%.

Q. Now you are talking about the average of all the lines there, the four roads?

A. Yes.

Q. Now give us the Northern Pacific expenses and state that on the system.

A. I will do it. Well, the Northern Pacific is only 30.4% in excess of the system.

Q. You show it here $4.23 as compared with $5.51?

A. Yes, there is a difference of $1.28, and dividing it by $4.23 what do you get——

Mr. Peterson: It is 130% on the revenue figure——

A. I beg pardon, these are expenses.

Mr. da Ponte: Here are our expenses of $4.37 on the system per 1,000 gross ton miles, according to your report, and $5.51 in the State of Washington. Now what is the percentage?

Mr. Peterson: The percentage is 130.

Mr. da Ponte: Now you know it to be a fact that on any transcontinental railroad in the United States that the system expenses per 1,000 gross ton miles are less than the expenses per 1,000 gross ton miles in any state?

[fol. 552] A. Well that goes directly contrary to mathematics, if I understand your question, and that is that the whole is less than its parts.

Mr. Capron: Why no, it is perfectly obvious isn't it, that state traffic is made up of comparatively short hauls as compared with the system traffic, which includes the transcontinental long haul tonnage. Now everybody knows it costs more per thousand gross tons on short haul traffic than it does on long haul.

A. Yes, I am merely calling your attention to the very large difference here. If you can justify that difference I have not a word to say, but I am only calling your attention to it.

Mr. da Ponte: And I say the fact is that because of the comparatively short haul intrastate the expense does exceed the long haul interstate business, which is reflected in the statistics for the system as a whole.

A. Well, I would think that the short haul would be considerably less.

Q. And the long haul business is reflected in your entire system expense?

A. And so is your short haul business.

Q. Yes, but you have so much greater percentage of the short haul in your particular state, and you have also your branch line

operations in the state to a greater extent than you have on the system as a whole.

Supervisor Cleland: Do these figures include interstate or long hauls or parts of long hauls?

A. Yes, the entire system was made up by dividing the total operating costs of each of the carriers as used by the Interstate Com- [fol. 553] merce Commission by the total gross ton miles. For the State of Washington they were made up by dividing the total operating costs as reported to you by the total gross ton miles as reported to you; in theory—in fact they were calculated, but they were calculated from figures reported to you.

Supervisor Cleland: And that includes both state and interstate traffic in both instances?

A. Yes.

Mr. Calderhead: Possibly the explanation that you are seeking for your figures lies largely in the fact that there are more branch lines in the State of Washington than in other states, in proportion to its main lines, and that the percentage of state ton miles to interstate ton miles is greater in this state than in any other state with the exception of the single road of the O. W. R. & N.

A. That is what bothers me. I know in the case of the Northern Pacific that that is the case, and I assume it is perhaps on other roads, but I can't understand why the O. W. R. & N. should show such a substantial increase.

Mr. da Ponte: Well, as far as the Northern Pacific is concerned you can see why there should be an excess——

A. The Northern Pacific has a great amount of branch lines. Now if the Great Northern have a correspondingly large amount of branch lines I don't know.

Mr. da Ponte: And on the branch lines of course the expense is much greater than on the main lines?

A. I suppose it is, looking at it merely from an operating standpoint.

[fol. 554] Mr. Balmer: You know that the Great Northern has numerous branch lines in the State of Washington?

A. I wouldn't call them numerous, no sir.

Q. Are you acquainted with the branch lines leading out of Wenatchee?

A. Yes, you have one running to Oroville.

Q. We have two, one to Mansfield and one up the river.

A. Yes?

Q. You know we have a branch line to Marcus?

A. Yes, and you have a branch line running from Rockport to Anacortes.

Q. And out of Marcus we have branch lines in two directions?

A. Yes they diverge, one runs to Roseland and the other from Northport to Nelson.

Q. And those particular branches are through lean territory are they not?

A. Well, the leanness of the territory has nothing to do with the cost of operation?

Q. Doesn't it?

A. Yes, it would affect the gross ton miles. Well, I think I could cover this by stating that I don't know why these differences exist. I will state that they do exist and that is all I know. I don't contend that I could explain it.

Mr. Henderson: Is that all for Exhibit 3-A, if so we will pass to Exhibit No. 4.

The Director: It is necessary for part of the members of the Commission to leave at this time. I presume though that Mr. Gray wants to finish his testimony?

A. I would like to do so. I could be through with it in three or four minutes.

[fol. 555] The Director: We will take a recess for 10 minutes and if I am not here you can resume anyhow.

(Recess.)

(After recess, all parties present as before.)

The Director: Now at the conclusion of Mr. Gray's testimony we are going to adjourn until a later date, the announcement of which will be given in ample time to everyone. We had hoped to have time to finish the hearing at this sitting and we had planned to set aside three days for the hearing. In the meantime however this Interstate Commerce Commission hearing, which is a joint hearing with this Commission, was set for tomorrow at Tacoma, and it seems as though it would be impossible to finish the hearing at any rate as some of the testimony has not yet been prepared. So at the conclusion of Mr. Gray's testimony the hearing will be continued until a later date, which will probably be about the first of September from the condition of our calendar.

Mr. Dudley: Mr. Chairman if I may make a suggestion—if the hearing of the case went from June to September, and these exhibits are then introduced by the log shippers, which I assume will be the case, and we receive them then for the first time, we will be forced then to ask for a further continuance to some other day in order that we many see if any further testimony is needed. Now it seems to me that that might be obviated if the log shippers when they prepare their exhibits will furnish us copies of them so that we will be prepared.

Mr. Henderson: We will say in that regard that we have to make up the most of our exhibits from figures furnished us by the carriers [fol. 556] and some of the reasons they are finding fault with these exhibits here is for the reason we saw their figures for the first time today. Now we have given the carriers copies of our exhibits just as quick as we could get these figures copied, and we didn't receive their exhibits until the hearing was on. We must have figures from the carriers from which to make up our figures.

Mr. Dudley: My remarks were not in the nature of criticism. The Milwaukee log figures are not in yet so I will plead guilty, we will have to get them. They have been compiling them from the station agents' reports and they were not received when I left Seattle,

as soon as they are received they will be compiled. My suggestion was not intended in the way of criticism but for a suggestion, so we could close the matter up at the next hearing.

Mr. Welsh: I will say that we have all our exhibits here, about 7 or 8 in number, and we would be glad to give them to the carriers, but would much prefer to introduce them in evidence without any extended examination on them. Just swear Mr. Richmond to say whether they are correct or not, and ask him whether they are true and correct, and pass them around and introduce them at this time.

The Director: If we have time after Mr. Gray's testimony we will consider that.

Mr. Henderson: Now Mr. Gray will you pass to Exhibit No. 4?

A. Exhibit No. 4 might be considered as a summing up of the preceding exhibits. Exhibit No. 4, in substance, is a reduction of the cost of operation of each of the four carriers to the basis of 1,000 gross ton miles. You will recall that Mr. Nicholson in his testimony before the Commission at the last hearing, laid great stress upon the [fol. 557] necessity of reducing his operating expenses to that particular unit and in that he is correct. I have reduced the operating expenses of the carriers to the figure of cost per 1,000 gross ton miles, and I have then applied that figure to the gross ton mileage of the log traffic, and have then arrived at just how much money the carriers were making on the log traffic, and just how much money they were losing on the other traffic within the state. To sum it all up by explanation the notes at the bottom of the page show that during the year 1920 the four principal carriers made a profit over total operation from state log traffic of at least $523,169, and at the same time sustained a corresponding loss of at least $8,233,587 on all other freight traffic handled within the state. Now allowing for possible errors, due to the necessity of making estimates, there is a great variance in those two figures and they indicate nothing else than the fact that the carriers are making money on the log traffic and losing money on all other traffic.

Q. Now these figures of 35% and 40%, with relation to intrastate and interstate business, would that make and difference in Exhibit No. 4?

A. They have no bearing whatever on Exhibit No. 4. Now I want to make an explanation that that Exhibit No. 4 contains no elaborate theories or calculations, it is simply a process of division that anyone can make. It is just a case of taking the figures which have been introduced by the carriers and supplied to the Commission and divide the one by the other and you have the result. If I am wrong I will be very glad to correct my figures.

Q. Will you just explain that exhibit a little more fully?

A. Line 1 in Exhibit 4 shows the total cost of freight operation [fol. 558] of each of the four carriers within the state of Washington, for the year 1920, the Great Northern figure being an estimate, the other figures being furnished to the Commission. Line 2 shows the total car miles, loaded and empty, within the state, on each of the four carriers, all figures (except in the case of the Great North-

ern) having been furnished to the Commission—the Great Northern having been estimated. Line 3 shows the total tare ton miles, which was arrived at by multiplying the total car miles loaded and empty by 19, that figure of 19 tons, as representing the weight of the average empty car, was taken practically from the Milwaukee Exhibit No. 2, as I recall it, which gave quite a lot of information concerning that particular figure. The total net ton miles were taken directly from reports to the Commission, except in the case of the Great Northern, which was estimated. The sum of the tare ton miles and the net ton miles will give the gross ton miles. In other words line 5 is the sum of line 3 and line 4. Having the total gross ton miles I then divided the cost of freight operation by the total gross ton miles and found the freight operating cost per thousand gross ton miles, as indicated by Mr. Nicholson as being the correct procedure. So much for the traffic as a whole within the state, traffic of all kinds. The next step was to apply this operating cost for the state as a whole to the logging traffic. The log car miles loaded were given in every case for 1920 by the carriers except in the case of the Milwaukee, which gave the 1919 figures, which I was forced to substitute. I assumed an equal empty log car mileage, which the carriers themselves did in every exhibit they introduced at the previous hearing. I then multiplied the total loaded car miles and the total empty car miles by the average weight of a [fol. 559] log flat operating in the State of Washington, and as near as I could get it it was 14 tons, and I went to considerable trouble too to find out what that weight was. I might add that it may be slightly higher in the case of the Milwaukee but it is slightly lower in the case of some other roads. To the net ton miles I added the total tare ton miles, as in some instances given by the carriers and in other instances by figures supplied by the carriers, arriving at the gross ton miles of log operations. I then multiplied the gross ton miles of log traffic by the cost of operation within the state per thousand gross ton miles, and arrived at the cost of operation relating to the log traffic. The revenue from logs is given in the previous exhibits. The revenue from other freight is given in the previous exhibits. It requires only a simple subtraction to show that the Northern Pacific made a net earning of $226,639 from log traffic, and lost $1,392,923.00 from other freight traffic. That the Great Northern made a net revenue of $48,266.00 from the log traffic and lost $3,866,075.00 from other traffic. That the Milwaukee made a net revenue from log traffic of $146,261 and lost on other freight traffic $3,602,401.00. That the O. W. R. & N. made a net revenue from log traffic of $102,003.00 and sustained a net loss from other traffic of $858,805.00. The comparison being a net from the log traffic of $523,169.00 as compared with a loss of $9,710,204.00. That is for all carriers. Now, then, there are some incidental freight revenues, such as switching, demurrage, and some other things which probably ould accrue to the freight traffic other than logs. They amount, in the case of the four carriers to $1,476,617.00; and assuming that that revenue should all accrue to traffic

other than logs, and subtracting it from the total of line 14, it shows that the loss to the four carriers from traffic other than logs was [fol. 560] $8,233,587.00 as compared with a gain of $523,169 in the case of logs.

Mr. Carey: Now that gain, computed on this exhibit, was on log traffic moving almost entirely under rates in effect prior to August 26th?

A. With the exception of the last four months it was all earned under rates in effect prior to August 26th.

Supervisor Spinning: Do you know what per cent of the log movement occurred since August 26th?

A. Right offhand I don't, but I have some figures and I can furnish the figures if you desire them.

Supervisor Spinning: Well, you could tell what the entire movement would have been under present rates and what it would have been under former rates?

A. Yes, sir.

Supervisor Spinning: You had better do it.

A. Now I don't know that I can give you the net — because I wouldn't have any way of finding out what the operating expenses were during the two periods, but I will do the best I can.

Mr. da Ponte: According to Item 7, Log Car Miles Loaded and Empty, you took that from this previous exhibit, and I understood you to say that that included an estimate for the month of December, taking one-third of the miles made in September, October and November?

A. Yes, sir.

Q. And you don't know what the actual December mileage was?

A. No.

Q. And if that is wrong then it affects the figures of course.

[fol. 561] A. Yes, sir.

Supervisor Cleland: Is that for all roads?

A. No, Northern Pacific.

Mr. da Ponte: Now your Item 12, Revenue from Logs, Gross, the net figures as well would also be affected by that assumption, if it is erroneous?

A. Yes sir.

Q. Now, then, you have gotten your gross ton miles for the entire state, which you show as 385,875,408, now you apply that expense to the 1,000 gross ton miles of log operations to get your expense of doing the logging business don't you?

A. Yes.

Q. And that assumes that the log business costs the average of all of the business in the state of Washington?

A. No, that doesn't carry that assumption.

Q. Is that where you got your estimate of cost?

A. It may be but that doesn't carry that assumption.

Q. Then I think I understand you, that if the expense of conducting the log traffic is not the average of the entire expense of all the traffic in the state your figure is wrong isn't it?

A. Yes. I have treated the freight traffic within the state of Washington as a whole.

Q. Put it into a jackpot?

A. Yes.

Q. And you certainly concede that is no criterion of the actual expense of any particular kind of traffic?

A. I don't know—I will say that what we have done all through this exhibit was to compare systems with—In other words I have [fol. 562] figured out how much within the state of Washington it costs to handle 1,000 gross ton miles of all kinds of business, and inasmuch as the log traffic constitutes a very substantial portion of the business——

Q. I think your statement is clear and perfectly understood and I think there is no doubt but what we understand it——

Mr. Balmer: I am not so sure——

Mr. da Ponte: Well, I speak for myself. I think I have no doubt that I understand it. Now you took your net ton miles as reported to the Commission by the Northern Pacific?

A. Yes.

Q. And they don't report gross ton miles to the state?

A. They don't.

Q. And so you get your gross ton miles by assuming the weight of 19 tons to the car?

A. Yes.

Q. And you multiplied that by the number of cars?

A. By the number of car miles.

Q. And added that to your net ton miles to get the result?

A. Get the gross.

Q. Now, then, of course that assumes that the figure of 19 tons is correct for the weight of the car?

A. Yes, I investigated that carefully, very carefully, and the exhibit shows that to be the case.

Mr. Balmer: Am I correct in assuming that the only factors that you have used to differentiate a case of handling the log traffic from a case of handling all traffic are these: First, a tare of 19 tons per car on business in general as against a total of 14 tons per car, and an empty movement in the log business equal to the loaded [fol. 563] haul as compared with an actual empty car movement on other business, as compared with the actual loaded haul; aren't those the only two factors that you have used in differentiating from the cost of handling logs the cost of handling all traffic?

A. Yes sir.

Q. Now you haven't taken into consideration the factor of length of haul?

A. I am dealing, Mr. Balmer, with the freight traffic within the State of Washington as a whole.

Q. Yes, and with the exception of the two factors I have mentioned, you have taken the cost, according to your figures, of conducting the transportation in the State of Washington as a whole and then have applied that to the log business, and have calculated that the result that you reached represents the cost of handling the

log business, and that doesn't include any comparison of the cost occasioned by the difference in the haul?

A. I have never stated that this figure—per 1,000 gross ton miles—that I have introduced here, represents the cost of hauling the logs, I have not made any such statement. I have simply stated that taking the traffic in the state as a whole—of which logs is a very large part—and contributes an infinitely greater part from the mill or lumber shipments—I have simply said that taking the traffic of the state as a whole and reducing it down you get a certain gross figure, and applying that to the log business you get a certain result.

Q. And you don't say, then, that the result that you have reached fairly represents the cost of handling logs?

A. Do you mean by that that I don't say that this figure I get would be the result if I knew the actual cost of hauling all of the different log shipments and would add them up?

[fol. 564] Q. No, that is not what I asked you. I asked you whether you submitted a conclusion here, as shown by your Exhibit No. 4, as representative of the cost of handling the log business?

A. Let me answer that in this way, that is that I don't know what the cost of handling the log business is as distinguished from the entire business, but I do know what the cost per 1,000 gross ton miles expended in the State of Washington is.

Q. Then assuming that the cost of handling the log business is the same as the average cost of handling all traffic per 1,000 gross ton miles in the State of Washington, except as affected by the two factors I have already mentioned, in your examination, and which you have admitted are the only factors you took into consideration,—the conclusion that you reached is only what the total cost of conducting transportation on all lines in the State of Washington is?

A. It is a rather long question but I think that is right. I think I answer yes, to it. I have considered the traffic movement in the state as a whole.

Q. Now I want to take up particularly some Great Northern figures——

A. Let me interrupt—you can go ahead and change these figures quite a lot and still find that the log traffic is earning at a very much higher rate than the other traffic. You can multiply it by two and find out that the log traffic is producing——

Mr. da Ponte: You won't find that it produces more in proportion to the receipts than the other traffic?

A. I don't know——

[fol. 565] Mr. Balmer: You just testified, early in your examination, that you were of the opinion that the cost of handling the long haul business was greater than the cost of handling the short haul business?

A. The cost of handling the long haul business is greater than the short haul——

Q. I beg your pardon, that the cost of handling the long haul business is greater than handling the short haul business?

A. I think that is obvious.

Q. Well, you have been a traffic expert for a long time and you can readily estimate that, can't you?

A. I don't know about this traffic expert business. I have been an engineer for quite a while.

Q. At any rate that factor is one that is not taken into consideration at all in your statement?

A. No, I have not attempted to differentiate, between long hauls or short hauls on different classes of business, I am simply showing that dealing with the State as a whole the log business constitutes a very large portion of it, and that with the expense of the logging business, which is 37% greater than the System expense to begin with, that the log traffic is making something and the other is losing.

Q. You haven's shown in your Exhibit anything for taxes?

A. No.

Q. And when you mention the fact that the railroad is making a balance you simply mean that they have a balance over expenses?

A. Yes, net over operations——

Q. Now you- statement shows that the balance on the part of the Great Northern for one year, on the basis of your figures, some of [fol. 566] which are estimated, is $48,226.00?

A. Yes, your own figures that you just introduced show that you are making a profit on logs, $7,000. I think in two months——

Q. Yes, $7,000 above operating expenses. Now an Exhibit has been introduced here showing that the Great Northern tax accruals for the year 1920 amount to $1,847,947.00 in the State of Washington, and our figures as to revenue for 1920 show that on all business, passenger and freight in the State of Washington the figure was $18,508,427.82, indicating that out of every dollar that we took in one-tenth was spent for taxes.

A. Out of every dollar you took in one-tenth was spent for taxes; well, I am not prepared to either affirm or deny it, it may be so.

Mr. da Ponte: Yes, that is about right.

Mr. Balmer: About one-tenth of the gross receipts are spent for taxes in the State of Washington; out of every dollar 10 cents of it goes for taxes, and if you take out of this balance on the part of the Great Northern, which you say is $48,266.00, the proportion of that revenue that will have to be used in paying taxes, which will amount to $31,849.00, you will find that the balance above operation and back taxes on the part of the Great Northern, for handling logs for one year, amounts to $16,417.00.

A. Well, you are just telling me something. Go ahead and tell me this, while you are at it, what your operating ratio was in 1920. Does the Exhibit show it?

Q. No, but if you would like to know it——

A. I would like to know whether your system in the State of Washington has made or los- money last year. I presume it lost [fol. 567] Q. Yes. You don't think that the balance of $16,-417.00, on the basis of your own figures, after paying operating expenses and taxes, would go very far towards earning us anything on our property that we have invested in this state, do you?

A. No, I would not think so.

Mr. da Ponte: You have not attempted to ascertain what percentage of the gross receipts from the log traffic are consumed in operating costs as compared with the percentage of gross receipts from all traffic which was so consumed, have you?

A. Well, how would you arrive at the opening cost of your log traffic, just what do you mean by that?

Q. I mean this, if you are earning we will say $100,000 from the log traffic, and you are earning $100,000 from some other class of traffic, or all other classes we'll say, have you undertaken to ascertain what proportion of the $100,000 earned from the log traffic has been consumed in operating expenses as compared with the proportion earned from other traffic that is consumed in operating costs?

A. No I have not attempted to analyze the cost of hauling fruits from Wenatchee to Butte, Montana. Mr. Mount has testified here at great length that it was absolutely impossible to determine the cost of handling any particular commodity, so why should I attempt to do it.

Q. You will admit the conclusion that the carriers are earning a profit from logs and losing on everything else, won't you?

A. Well, I won't say that. I will say this, that on the basis of averages that is the case.

Q. Now have you considered this—we had an exhibit here yes-
[fol. 568] terday which Mr. Capron offered, and it compared the per ton mile revenue on logs with equal distances with the per ton mile revenue from half a dozen other commodities——

A. Junk?

Q. Junk, yes. Now that compared it with the lowest class of traffic we could find, and that Exhibit showed that the per ton mile return from the log traffic for equal distances was from one-quarter to one-half of what it was on other commodities. Now please explain that; those are the actual returns—how it is possible to arrive at the conclusion that the log traffic is profitable and that other traffic is unprofitable?

A. Well, you must take into consideration something in relation to the volume of business, that is a recognized element in all rate cases.

Q. Yes it includes coal and lumber and grain and all other commodities?

A. Yes, but they don't move anything like the other commodities all over your system. I admit coal does——

Q. We picked out these particular commodities because their ton mile earnings for equal distances would be lower. If we took every single item that was in the tariff you would still find that discrepancy only to a greater extent. Now take the per ton mile earning from all the other traffic in the state, it is so much greater than from the log traffic, how are you going to figure a profit on the log traffic and a loss on other traffic, have you thought of that?

[fol. 569] A. I don't know that I have contemplated Mr. Capron's Exhibit in exactly that light. It has been very interesting. I think Mr. Mount put in an exhibit in which he also discussed the

rates on scrap iron and commodities like that. But the log business is a very substantial matter, it constitutes a very large percentage of your traffic.

Q. Yes, so that if you make a loss you make a big one?

A. You are right there, I guess.

Q. And that fact adds to the loss?

A. Yes, if you lose so much per ton the more tons you haul the more you lose.

Q. Now we couldn't last this way and I would like you to explain how, with such a showing as that, the actual per ton mile revenue received from all other commodities being mile per mile of haul so much greater than the log traffic, that you can possibly figure a profit from the log business and a loss on the other traffic.

A. No, I am at a loss to try to explain a thing like that, but I do know this, you can make a very small margin of profit on a particular commodity and if you handle enough of it you will make a greater gross revenue and perhaps a greater net revenue in the course of a year than you will from some other commodity the rate on which is two or three times as high but which you don't haul much of.

Q. Yes, that is true, but we are dealing with the statistics here——

A. Considering the incidental freight revenue as applied to the exhibit there, and which unquestionably should accrue to other business, you incurred a much smaller deficit than any other other roads and you handled a great deal more logs. You were the fellow that [fol. 570] handled the logs and you have the smallest deficit of any of them.

Q. Yes, but you are not offering that as a suggestion that the other traffic made up the loss on logs?

A. No. It is awfully hard to answer your questions but I will do the best I can.

Mr. Balmer: While he is thinking of another let me ask you this: Of course your cost per 1,000 gross ton miles for conducting transportation in the state of Washington is the unit cost of handling all transportation, a large portion of which moves on the main line, isn't it?

A. Yes, that is true.

Q. And it is notorious and generally admitted in a proceeding of this kind, that main line operation is cheaper than branch line operation?

A. Yes, I presume that is the case.

Q. You also know from the evidence received in this case and from your own experience, that a great many of the logs, in fact a preponderance of the logs are handled on the branch lines?

A. Yes but Mr. Nicholson testified that the reason why the cost of operation on branch lines was so much higher per unit was, because the traffic was so light—if you didn't have the logs what would you do?

Q. Then we would not have the branches.

Mr. Henderson: No, nor main lines either——

Mr. Balmer: The three questions I have just asked you indicate that that is possibly another factor that should be taken into consideration and it has not been taken into consideration in your statement in an effort to find the cost of conducting the log service?

[fol. 571] A. I want to answer that question; it has kind of gotten away from me. I will answer it by stating—and perhaps this will cover it, that I have made no effort to determine the cost of handling the log traffic. There is one thing you want to bear in mind, and that is, that I have taken into consideration the operating expenses as a whole, for the State of Washington, which, as I understand it, includes a part of your St. Paul general office expense.

Q. Yes, that is true.

A. And in the questionnaire sent out to you from St. Paul they put their pencil on certain questions and said get this together, indicating that they considered that those were the things—Please repeat that question?

Q. Just what factor was it—the factor that the majority of the logging business is done on the branch lines, whereas your average cost per 1,000 gross ton miles of conducting transportation in the state is affected by a large quantity of traffic moving on the main line, where, of course, the expense of handling the business is cheaper than on the branch——

A. Yes, if you are just including the question of hauling the log traffic—I would imagine that to be a question of a sparate study. But the log traffic contributes so substantially to your branches and your branch makes your main line——

Q. In that same connection and in view of what you have just said, I suppose it is your inference that the logs although they are handled on branches should not be charged entirely with the higher cost of conducting the transportation on the branches, but should have some benefit of the lower transportation cost that prevails on the main line. Is that the inference that you intend to convey?

[fol. 572] A. No, I don't intend to convey any inference.

Q. Well, if that is not the inference you intended I didn't need to ask the question.

Mr. da Ponte: You said something about volume having something to do with it. Now according to your statement in Item 7 of your Exhibit No. 3, your intrastate log shipments revenue ton miles of 113,621,155—now as compared with that you have revenue ton miles of all freight other than intrastate logs $1,525,740,573. Now bearing in mind that all of that volume of business—and every ton of it moves under a fairly high rate mile for mile for equal distances compared with logs, how are you going to compute a profit on the log business and a loss on the other business, now please explain that?

A. I don't know that I would try to explain that. All I have done here, which I think is quite clear is, to compute the cost of handling the traffic within the state and apply that to the log business; apply that right down along the line to the system, to the state, to the log traffic and other business.

Mr. Balmer: I don't want to bore you or the Commission but this subject interests me and is an important matter. I want to ask you this question: Of course you know that generally speaking that the revenue per ton mile or per any unit for short haul traffic is greater than the revenue for the same unit on the longer haul of the same traffic?

A. Yes.

Q. Now that being true isn't it a fact that any basis such as you have used here for determining the general cost of conducting transportation in the state and applying that cost to the short haul business, such as logs—which you have just admitted carriers a higher proportionate revenue than a longer haul would carry, will inevitably [fol. 573] show that the short haul business is being conducted at a profit and that the long haul business is being conducted at a loss? Won't your basis of figures work out that way?

A. May be so, but I don't say so. I don't see why.

Q. Well, if you don't see why please explain why not?

A. Tell you why I don't see why?

Q. Yes?

A. That is pretty hard for me to do. It is pretty difficult for me to get all these things right off the jump—but of course under this theory the freight that had the greatest gross ton miles would carry the greatest proportion of the operating costs——

Q. It would not carry the greater proportion of the revenue?

A. It might or might not, depending on what the rate would be.

Q. You wouldn't expect more revenue per unit whether it be gross ton miles or car miles or anything of the kind, you wouldn't get any more revenue for the long haul than the short haul?

A. No, not per ton mile.

Q. And yet you would be charging the expenses to the long haul and the short haul, on your basis of figures, on the same rate, wouldn't you?

A. Yes, but I am taking the entire revenue of the state. I am not taking a low ton mile basis and figuring, I am taking the total.

Supervisor Cleland: Maybe Mr. Gray has just disproved his theory that the short haul has the more expense?

A. The reason for that is—I wish I knew what your question was, [fol. 574] it has gotten out of my mind. I think when I told you that you got a whole lot less revenue per ton mile out of your through traffic in the state than you did out of logs—I think that answers your question.

Q. That aanswers my question, does it not

Mr. da Ponte: Wait a minute, let me get through with him. You dont' mean to say that we get a less revenue per ton mile for a 30 mile haul on brick and cement, for instance, than we do for logs, mile for mile?

A. No, no. You referred to those two figures here of 500,000 as compared with one billion, and you wanted to know why it was when the log rate was so low per 1,000, comparatively speaking, why it was you could make a profit on logs and a loss on the others.

Q. No, the question has escaped you. I said how can you explain or show a profit on the log traffic of 113,000,000 revenue ton miles, and then show a loss on the other traffic on one and a half billions, approximately, revenue ton miles, whereas at the same time every ton mile of the other business earns a greater return?

A. It shows it doesn't it?

Q. For equal distances?

A. For equal distances, yes.

Q. Out of the log traffic?

A. Yes, but when you refer to the total ton miles the question of equal distance don't enter into it.

Q. Now when you are comparing the earning power of any particular road you are not going to compare the movement of 100 miles of one commodity, and 10 miles of another. You have to give them [fol. 575] mile for mile. If you were a traffic man you would understand that when you compute the earning power of rates you get the distance, whatever it may be, and you show your per ton mile earnings for that distance. That is the way to compare rates, and not compare the ton mile earnings for a 10 mile haul with a 1,000 mile haul.

A. I have not done anything like that.

Mr. Carey: It seems to me that is a matter to be argued to the Commission.

Mr. Carey: Let me ask you this. As I understand it your purpose in preparing this Exhibit was to reduce this problem to figures, as far as it can be reduced to figures?

A. Exactly.

Q. Now the revenues from the log traffic are known and fixed and you use those absolute figures——

A. Precisely.

Q. Now in computing your operating expenses you have followed the very plan suggested by Mr. Nicholson at the last hearing, and that is, that it is not possible to allocate all the expenses of any one particular commodity and you have to take an average applicable to all commodities?

A. Yes sir, with the cost per 1,000 gross ton miles——

Q. In other words you have computed your operating expenses in the only way Mr. Nicholson said it was possible to compute every expense as applicable to any one particular commodity?

A. Why Mr. Nichlson delivered a regular oration on it and I was impressed with it.

Q. And taking those known revenues and taking the expenses according to the theory advanced by Mr. Nicholson it produces the result that your Exhibit shows?

A. Exactly.

[fol. 576] Q. Now in preparing this exhibit you have not undertaken to show in that any factors entering into the making of a rate, that is not capable of mathematical computation?

A. I have not.

Q. So that there are questions of economic policy that might affect the rate that are not in this exhibit?

A. Certainly; the exhibit is perfectly clear.

Supervisor Cleland: Well, assuming the conclusion that we must reach from your exhibit, that if it made a profit on logs of an average haul of 31 miles, and made a loss on all other traffic with a haul of 200 miles, that there is a profit being made on the short haul and a loss on the long one?

A. The tabulation would indicate that.

Mr. Carey: On logs?

Supervisor Cleland: On all traffic——

Supervisor Spinning: Not on the short haul of other traffic; you don't mean to say that there is a gain made on the short haul on other traffic greater than the long haul?

A. No, I think it would depend on the question that you would have to insert the revenues on the particular class of traffic in order to draw that conclusion. If all other commodities on short hauls moved at approximately the same distance and rates as logs I think you could draw that conclusion.

Supervisor Cleland: But in this case it has been stated a number of times that logs constituted about 35% of the total traffic. Now that is a big item. Now there are a number of short hauls of other traffic that do not constitute a great volume of the traffic however, and it seems to me, to carry your theory to its logical con-
[fol. 577] clusion it would show that a profit is being made on the short haul and that a loss is being sustained on the long haul.

A. Well, it might be. I wouldn't be prepared to say. Apparently my head is not working clearly.

Mr. Henderson: It might indicate that they were losing money on their short haul business that didn't have the volume.

A. I think we would have to take into consideration the amount of revenue you got out of each particular class of traffic, because the operating expenses were fixed——

Mr. Dudley: Do you concede that the cost per ton mile of hauling on the long haul is less than on the short haul?

A. Yes I presume that is the case, I have always understood so.

Q. In fixing your cost basis here you have disregarded the item of distance entirely—in your cost of hauling per ton mile you have disregarded the length of the haul and simply calculated for the state?

A. Yes, but I don't like you to say that I have disregarded, because that carries the impression or inference that I have deliberately left something out, which is not true.

Q. Now the statistics prepared by Mr. Calderhead shows that the log haul runs from about 35 to 31 or 32 miles, the short haul distance?

A. Yes.

Q. Now when you determined the cost of the log haul operation you applied simply the cost which is based on the longer haul, where you have a lower cost, so then you have introduced an element in

there which will be misleading as to the actual cost of that log haul business?

[fol. 578] A. I have never contended that these figures represent the actual cost of hauling the logs.

Q. Then your statement at the close of your statement there, that they made a profit on the business is not correct; it is only on the assumption that the cost of the log haul was to be based upon the average cost of the entire long and short haul business?

A. Well my statement that the log traffic was yielding a profit and the other business was not, was simply based upon the operations within the state as a whole. I don't know whether the cost of hauling logs is greater or less than the figures I have shown.

Q. You don't know whether there is any profit on hauling the logs or not?

A. Well I am inclined to think there is.

Q. If you knew the actual cost of the log haul you could determine that?

A. The trouble is, when you go into the actual cost of the log haul—I don't know how you would go about that. I think you should take into consideration every element that might affect it.

Mr. da Ponte: Do you understand that Mr. Nicholson's figures were based upon the average cost of all the traffic in the state when he testified?

A. Yes, they were.

Q. Now weren't they based upon the average for the Coast Division?

A. Sure——

Q. That is quite a different thing?

[fol. 579] Yes, but I am stating that Mr. Nicholson is holding up the idea that the proper unit is the 1,000 gross ton miles, and he is right.

Q. But you used the average gross ton miles on the system and he took it on the Coast division, where the logs moved.

Mr. Carey: My recollection of that doesn't agree with yours, my recollection is that he took it for the entire state.

Mr. da Ponte: He would not be general manager of a railroad if he computed his costs on such a basis as that.

A. These problems come up before the Commission in electrical costs, where the problem of one line——

Mr. Henderson: Now the next Exhibit explains itself?

A. Yes, sir, the next exhibit explains itself. I want to be brief on this so I can get away. Exhibit No. 5 shows the plain and stepped curves of log rates in the State of Washington prior to the increase of August 26th. The figures shown in the different columns were arrived at in every case by plotting on platting paper the various rates and then drawing through the field of the rates the plain curve——

Mr. Henderson: Now handing you what I will ask to have marked Exhibit 6, I will ask you if that is the one which indicates the manner in which you arrived at the rates which you put on the preceding exhibit?

A. That indicates the manner of arriving at the Western Washington railroad rates. It is not a very good print, but you will notice these little dots, those are the different rates, and from this curve [fol. 580] were taken off the figures shown in Columns A to Y, and then by taking these figures and stepping the rates in order to make a distance tariff out of it, the figures shown in the second column, etc., were arrived at.

Q. Now in reference to Column D, does that rate in column D represent what might be termed the average commodity trainload rates, or the rates in effect prior to August 26th, 1920?

A. Yes, that is the rate under which the log traffic in the state of Washington moved prior to the increase in rates.

Mr. da Ponte: Average of all the rates?

A. Yes, sir.

Mr. Dudley: Could we get one of these blue prints?

A. I can get you one.

Mr. Dudley: Otherwise I would say that I would object to the introduction of the blue print as immaterial.

Mr. Henderson: May we have an understanding with reference to exhibits before we adjourn. The railroads have asked us to give them copies of our exhibits, which we would be glad to, but we would like to have copies of their exhibits which they are going to introduce in order that we may know whether we will have any exhibits or not.

The Director: We will ask the Carriers to furnish copies of all of their exhibits not already furnished, as soon as possible. Now as far as this Department is concerned we are going to wind this log case up some of these times, and we are not going to wait for any additional exhibits. The hearing is adjourned to some future date, ample [fol. 581] notice of which will be given, but it will depend upon the condition of our docket.

Thereupon the hearing adjourned.

[fol. 581a] IN SUPREME COURT OF WASHINGTON

[Title omitted]

CLERK'S CERTIFICATE

I, C. S. Reinhart, Clerk of the Supreme Court of the State of Washington, hereby certify that the above and foregoing, together with the six volumes accompanying the same comprising in all seven volumes, of which the within is Vol. 5, pages 582 to 795 are full, true and correct transcript of the record in the above-entitled cause, and that in pursuance of the writ of error heretofore received I now transmit the same together with the original writ of error and the original citation which is contained in Vol. 1 hereof.

In testimony whereof, I have hereunto set my hand and affixed the Seal of said Court, this 16th day of April, 1924.

C. S. Reinhart, Clerk of the Supreme Court of the State of Washington. (Seal of the Supreme Court, State of Washington.)

[fol. 582] [Title omitted]

This matter came on again for hearing at Olympia, Washington, on the 24th day of October, 1921, pursuant to adjournment from June 27th, 1921, before Director E. V. Kuykendall and Assistant Directors Hance H. Cleland and Frank R. Spinning; the Department being represented by R. W. Clifford, Assistant Attorney General, A. W. Dolphin, attorney, O. O. Calderhead, Traffic Expert and H. O. Berger, Assistant Traffic Expert; the case continuing through from the 24th to the 29th of October, both dates inclusive, and same being reported by E. J. Delbridge and H. S. Taylor.

All the parties were represented as at former hearing.

The Director: You may proceed.

Mr. Dudley: We will call Mr. Crane.

E. B. CRANE, a witness produced on behalf of the respondents, after being first duly sworn, testified as follows:

Direct examination.

Mr. Dudley:

[fol. 583] Q. What position do you occupy with the Milwaukee Railroad?

A. That of engineering auditor.

Q. You have been engaged in the valuation work which is being, or has been performed by the Interstate Commerce Commission on the various roads with reference especially to the Milwaukee road?

A. Yes sir.

Q. I call your attention to exhibit No. 1 introduced by the Milwaukee, which purports to show a valuation of 59 million for the Washington road and equipment, I wish you would state just how that valuation is made up.

A. This valuation of 59 million dollars in the state of Washington was arrived at by dividing the total property investment on the mileage basis. That is, making a comparison between the total miles in the state of Washington and the total miles in the system, and pro-rating the total investment to mileage in the state.

Q. That included the road and equipment?

A. Yes sir, that included the road and equipment.

Q. Have you prepared figures showing the valuation of the road in Washington on a different basis than this basis prepared here?

A. I have taken the investment as it is shown in the records for the state of Washington and found a figure of $73,014,851, as the investment in road in the state of Washington.

Q. That is exclusive of equipment?

A. That is exclusive of equipment.

Q. Now is that broken down between the different divisions?

[fol. 584] A. It is not.

Q. I mean, have you a statement there showing the valuation of the separate lines, the Olympic line and the Willapa Harbor——

A. I have a statement here showing the investment in the various subsidiary lines of which this is a part.

Q. I wish you would read those figures into the record.

A. As they appear in the record, the investment in road for the Tacoma-Eastern, or the former Tacoma-Eastern Railroad——

Q. That is the National Park branch?

A. Yes sir, the National Park branch, was $3,486,057.77.

Q. And what other subsidiary lines?

A. The Milwaukee terminal railway amounted to $671,834.27, and for the Seattle Port Angeles and Western—now the Olympic division, it was $2,436,824.17, and for the Puget Sound and Willapa Harbor Railway $3,093,910.82, and for the Bellingham & Northern Railway $1,939,264.58.

Q. Those valuations are included in the 73 million you gave for the total?

A. Yes sir.

Q. And deducting that gives the balance of the road in the State of Washington?

A. Yes sir.

Q. What date are those valuations made up as?

A. December 31st, 1920. The investment for the subsidiary lines are as of December 31st, 1918. That being the time at which they were consolidated with the Chicago-Milwaukee & St. Paul Ry.

[fol. 585] Q. Well, have you added them in, the figures you have given for the subsidiary lines, additions and betterments, added them to the capital account since that time?

A. That is included in the 73 million, but not for the individual roads.

Q. As I understand it, the figures you give now are the investment figures as shown by the Milwaukee Investment Company's books, or its predecessors on these various subsidiary roads that it bought?

A. Yes, that is correct.

The Director: We would like to state that if there — any parties appearing at this hearing who have not appeared at the prior sittings, we would like to have them give their names and residences and the parties whom they represent to the reporter so that the appearances will be noted. You may proceed.

Cross-examination.

Mr. Henderson:

Q. Now are these investment figures which you have given the investment which the Milwaukee Railroad has in these subsidiary roads, or are they the investment figures taken from the books of the subsidiary road?

A. From the investment that the St. Paul railroad has in these roads.

Q. Then they are not taken from the records of the subsidiary roads?

A. No, not directly.

[fol. 586] Q. What do you mean when you say "not directly"?

A. The investment of the subsidiary lines, as it appeared in their records, were not taken over as a whole into the records of the St. Paul Company. The investment of the St. Paul Company I think are in all cases slightly less than the investment of the original company.

Q. What I wanted to get clear in the record was whether or not these figures as you have given as investment figures represent what the subsidiary roads cost the Milwaukee, or whether or not this is what it cost to produce those railroads?

A. This is what it cost the Milwaukee.

Q. You say that was less than it cost the subsidiary roads?

A. Yes, slightly.

Q. As shown by their records?

A. Yes sir.

Q. And the Milwaukee made a thorough examination at the time it purchased?

A. Well, I couldn't say as to just what examination they did make, I imagine they did.

Q. It is all the record of the subsidiary roads?

A. Yes.

Mr. Dudley: If the commission please, I will have the witness read these figures into the records for the reason I have not had time to prepare them as an exhibit. The witness arrived from Chicago this morning. It may be convenient to have them put in the form of an exhibit, and with the consent of counsel and the commission we will have them put into that form of exhibit and introduced. I think [fol. 587] our next exhibit will be No. 22.

The Director: I think that would be more convenient.

Mr. Dudley: I think so, and I make the suggestion that if the Commission prefers to have it done by its own officers——

The Director: I think Mr. Dudley, it would be perhaps better for you to have them prepare it and submitted it and furnish copies to all parties, same to be marked exhibit No. 22.

Mr. Henderson:

Q. Have you compared these figures which you have given with the figures shown in your annual report to the Commission?

A. These figures are a part of the figures that are shown in the annual report.

Q. Do you know whether or not these figures are the same as given in the annual report?

A. Yes they are.

Mr. Dudley: Mr. Crane may be excused.

Mr. Henderson: As far as we are concerned.

The Director: Does any one else desire to ask Mr. Crane any questions?

"No response."

The Director: You will be excused.

[fol. 588] SAMUEL GREENGARD (recalled).

Direct examination.

Mr. Dudley:

Q. You have been sworn in this case?

A. Yes sir.

Q. Have you collected the data with respect to the log shipments on the Milwaukee road in Washington from point to point during the year of 1919 and 1920?

A. Yes sir.

Q. Just state how you collected that data.

A. We had each one of our agents in the State of Washington give us a report on the number of loaded cars and the amount of footage collected by month for the year of 1919 and 1920.

Q. And you have tabulated that?

A. Yes sir. We tabulated it by division, separating the Idaho division between interstate and intrastate.

Q. That gives the month each shipment was made, from each point, the number of cars moved, the number of feet, and the number of feet on the cars and the revenue?

A. Yes sir, and the car miles.

Mr. Dudley: We desire to offer that exhibit in evidence, which will be Milwaukee's exhibit No. 23.

The Director: Any objections? It will be admitted.

(Marked Milwaukee's Exhibit No. 23 admitted.)

Mr. Henderson:

Q. When did you make this up?

A. We made it up since the last hearing.

[fol. 589] Mr. Dudley: That exhibit, Mr. Greengard, so far as it covers 1919 figures supplements exhibit No. 7 which contained a partial statement of the 1919 logging shipments?

A. Yes sir.

Q. That should really be substitued then for exhibit No. 7 for a complete figure.

Supervisor Cleland: How long a period does that cover?

A. 1919 to 1920.

Mr. Dudley: You made an additional statement did you not of the cost of car repairs? I think such an exhibit was introduced before as Milwaukee's exhibit No. 6.

A. Yes sir.

Q. What is the difference between this exhibit as now prepared and the former exhibit?

A. It is exactly the same; that is, the basic figures are exactly the same, excepting that in the present exhibit we have deducted the amounts of money collected from loggers for repairs of cars which was inadvertently included in the former statement. We have now corrected that and we made a subtotal here of all stations, excluding Idaho, as the figures are the same.

Q. Those were obtained by inspection of repair accounts at the various repair points?

A. Yes sir.

Mr. Dudley: We desire to offer this in evidence and while it is an amended exhibit we will call it exhibit No. 24.

The Director: This is a new exhibit?

Mr. Dudley: It is really an amendment of the former exhibit.

The Director: It will be admitted.

[fol. 590] (Admitted and marked "Milwaukee's exhibit #24".)

Mr. da Ponte: This will take the place then of #6 entirely.

Mr. Dudley: Practically, it will, yes.

Mr. Dudley:

Q. Now, Mr. Greegard, did you make a compilation of the amounts which had been collected from loggers or logging companies on account of repairs to cars that were injured during the logging movement?

A. Yes sir, for 1919 and 1920.

Q. How did you get the data for that?

A. We made a canvass of our Superintendents' offices and compiled the bills that were rendered against logging companies and then ascertained the dates they were paid.

Mr. Dudley: We desire to offer in evidence that exhibit as Milwaukee's exhibit No. 25.

The Director: Any objections?

Mr. Clifford: May we cross examine on it?

The Director: Yes.

Cross-examination.

Mr. Clifford:

Q. Does exhibit #25 take into account the moneys that were paid by shippers of logs where the agreement was that the log shipper should pay some portion of the cars' repair?

Mr. Dudley: The Milwaukee records show that there was no such agreement or provision. The only arrangement shown by the paper heretofore filed was that that one company was contributing something to the payment of the cost of the bunk—a certain proportion—[fol. 591] I have forgotten just what the proportion is, and there is no provision for repayment.

Mr. Clifford: Then all of the car repairing costs shown on exhibit #24 are born- by the company?

A. Yes sir.

Mr. Dudley: I call attention to Milwaukee's exhibit No. 26 for identification, entitled "Logging revenues and expenses per 1,000 gross ton miles and car miles—year 1920" did you prepare that exhibit?

A. Yes sir.

Q. Will you state just what is covered in that exhibit?

A. This exhibit covers the coast division and the Bellingham division, and is intended to show the actual logging proportion of train service and engine service separately, and total for train and engine service; or in other words, the out of pocket costs for logging operations on the two divisions mentioned during the year 1920. To that we have added the Maintenance of way and structures and balance of maintenance and equipment, traffic expenses, balance of transportation, miscellaneous operations, and a credit for transportation for investment, giving us the total operating expense which is averaged by cost per thousand gross ton miles and per net ton miles for each of the divisions, and a total for *the* both. To that we have added the amount of logging proportions for taxes, interest on investment, equipment, and interest on investment road, giving us a total expense divided as heretofore stated, and to that we have compared the total revenue which is taken from the previous exhibit offered, which is a point to point movement known as exhibit #23——

Q. In taking these items of expense on the coast division and the [fol. 592] Bellingham division, from what source did you take those figures?

A. We took the figures from our monthly division operating sheets; that is, the accounting department's final figures, the actual cost of operation for that particular division.

Q. That shows in each month then the actual operating costs on each division?

A. Yes, that sheet issued by the accounting department, that is form No. 8515.

Q. That is in accordance with the Interstate Commerce Commission's requirements?

A. Well, I don't know as it is in accordance with the requirements, but those are the same figures that will go into the annual reports at the end of the year.

Q. They are made in the same form as the Interstate Commerce Commission's——

A. Practically so.

Q. Now on what basis do you allocate the taxes to logging movements?

A. We took the total taxes and first we took out the passenger proportion, which is broken down on a train mile basis, and we took the balance and broke that down to logging on the basis of the gross ton miles of the logging bears to the gross ton miles of all freight.

Q. Interest on the investment, how did you break that down?

A. That is broken down in the same way.

Q. So in your investment in road you have used this 73 million dollars as shown by Mr. Crane?

[fol. 593] A. Yes, we have used that corrected figure.

Mr. Dudley: We desire to offer this in evidence as Milwaukee's exhibit No. 26.

Mr. da Ponte: Did you state how you apportioned it to the logging traffic?

A. The gross ton mile basis, yes.

Mr. Clifford: You carry on exhibit No. 26 two accounts, interest on investment equipment and interest on investment road.

Q. Are those accounts found in the Interstate Commerce Commission's classification?

A. Yes sir.

Q. What percentage is required under interstate accounting classification to be set apart?

A. There is no percentage applying to that, it is the actual. Your road is different from your equipment. Your equipment is your rolling stuff.

Q. I realize that but how do you arrive at that classification?

A. You mean how we arrive at the equipment investment?

Q. No, the amount that you assigned to these accounts.

A. Which one do you mean, the road or the equipment?

Q. Take the equipment first.

A. Well, we take the actual average number of logging plants and locomotives in the logging service. We have excluded in this particular instance, as we have heretofore, the cabooses, but we have taken all the logging flats; that is, average them, so that they average, and the locomotives——

Q. And what percentage did you apply to that?

A. Well we applied—what do you mean by percentage, do you [fol. 594] mean the percentage of the whole?

Q. Yes.

A. There is no percentage to apply if we take the actual number in actual service, there is no classification to it.

Q. How do you arrive at the road——

A. As I explained, the road is divided on the same basis as the taxes. That is, we take the total investment and figure it at six per cent per annum. We break that down between freight and passenger first, on the basis of train miles, then the remaining amount that there is we exclude the passenger—and the remaining amount which is charged to freight we break down further to the logging traffic on the basis that the logging gross ton miles bears to the total gross ton miles.

Q. You say then, you use six per cent as your percentage so far as the road is concerned?

A. And we use six per cent on equipment too. We use 6% as a return on the investment.

Q. You say that the amount of that percentage is provided by the Interstate Commerce Commission's classification?

A. You mean the road's 6%?

Q. Yes.

A. No, I don't know as it is.

Mr. Dudley: That is the statutory rate of interest in this state?

A. That is the going rate of interest?

Mr. da Ponte: What rate did he use?

Mr. Dudley: Six per cent.

[fol. 595] Supervisor Cleland: You say that is the going rate of interest?

Mr. Dudley: The statutory.

A. It is probably a little less than it is now.

Supervisor Cleland: Well, is that a satisfactory rate?

A. It is not, during Federal Control the government——

Sup. Cleland: Is 6 per cent satisfactory to the Milwaukee at the present time?

A. I would not say as to that.

Mr. Dudley: We cannot get any more, however, I believe that is the statutory rate where there are no rates fixed, 6 per cent——

Mr. Henderson: Statutory what?

Mr. Dudley: Statutory rate, that is prescribed in the judgment. Of course, that is where you have no rate fixed, that is what I mean when I say the Statutory rate.

Mr. Dudley: I desire to offer Milwaukee exhibit No. 26 in evidence.

(Admitted and so marked.)

Mr. Dudley: I now call your attention to exhibit #5, Milwaukee's exhibit No. 5, in which you show the cost of operation, revenues, etc. for nine actual months in the year 1919 and three estimated months.

A. Yes.

Q. I will ask you, in that exhibit what actual figures did you use for investment purposes?

A. For roads we used—that is, before the break down you mean, to logging?

Q. Yes.

[fol. 596] A. We use 46 million dollars.

Q. That is based on tthe road investment as shown in exhibit No. 1?

A. Yes, that was taking the investment of the system as a whole and breaking it down on a mileage basis.

Q. Then that is correcting that exhibit by substituting in lieu of 43 million dollars for road investment the 73 million dollars as shown by Mr. Crane's testimony, would result in increasing the amount of the investment charge and result in a greater loss than shows on the face of that exhibit?

A. Yes sir.

Q. That exhibit should be corrected then by that data.

A. Be increased, by increasing the investment or interest on the investment, which would show a greater loss than this exhibit now shows.

Supervisor Cleland: Mr. Dudley, why was the figure 46 million used in the former exhibit?

Mr. Dudley: That was arrived at in that original statement in exhibit No. 1, where the valuation was computed on the mileage pro rata or the number of miles in Washington being pro rated with the entire valuation of the system, which the auditing office furnished me, which I introduced in evidence as exhibit No. 1, but which Mr. Crane's testimony shows was inaccurate; his testimony this morning giving the actual investment value in roads in Washington instead of simply a mileage pro rata.

Mr. da Ponte: That wasn't incorrect, it took the system as a whole and found the valuation of the total mileage, — then you [fol. 597] multiplied that figure by the number of the miles in Washington——

A. Prorated it by the ratio between the total number of miles and the number of miles in Washington, and this last figure is the actual investment in the state of Washington.

Mr. Henderson: Didn't Mr. Crane testify that he got this property value by pro rating them on a mileage basis—73 million——

Mr. Dudley: No, that is actual investment; the other was on the mileage pro rata; this was on the actual investment.

Mr. Henderson: I wrote down here "pro rated on the mileage basis." I thought that was what he said.

Mr. Dudley: No, I asked him how the first one had been pro rated, and he said exhibit No. 1 has been prorated in that manner but the last exhibit has been prorated in the other manner.

Mr. Henderson: I see.

Mr. Balmer: You show some symbols against one of these items, but you don't explain those symbols. On the last foot note on the last sheet you will see this memorandum——

Mr. Henderson: Which exhibit do you mean?

Mr. Balmer: Exhibit 26.

A. Oh, pardon me. Well, the symbols mean this: take account 314, there is an asterix there, and that is brought down to show that the balance of maintenance of equipment—it is simply a reference to that. The 314 is part of the maintenance of equipment accounts and then we bring it down to the balance. The other accounts are [fol. 598] transportation accounts and we bring that down to show the balance of transportation, so that those hooked up would show the total transportation and maintenance of equipment.

Mr. Dudley: Have you, since the last hearing made or had made under your supervision a study of the actual cost of logging operations on the Tacoma-Eastern?

A. Yes sir.

Q. During what period?

A. For the month of July 1921.

Q. Just state what that study was, what you did.

A. Well, we went to work and went into the superintendent's offices and made up some special forms in order to analize the actual operation there. And in doing that we arrived—that is, we did this before the month elapsed of course, we did it in the early part of the month so that we could get the actual figures for train and engine men, taken directly from the time slips. The purpose of that, as well as segregating and allocating some of the large charges which could be allocated, was to arrive at some more or less definite idea—probably it would not be so very definite, but it would give us an idea of what it would cost for initial and delivery cost on log shipments; and also enable us to determine what the remaining expense or road expense would amount to.

Q. After you had calculated that data it was turned over to Mr. Gibbs for the purpose of making that calculation for use as an exhibit?

A. Yes sir.

[fol. 599] Q. You are familiar with the exhibit Mr. Gibbs prepared?

A. Yes sir.

Mr. Dudley: This exhibit marked for identification "Milwaukee's No. 27" that is the compilation that Mr. Gibbs prepared from the data which you had compiled?

A. Yes sir.

Mr. Dudley: I think that is all. I want to introduce the exhibit in connection with Mr. Gibbs' testimony, but that will be all of this witness.

Cross-examination.

Mr. Henderson:

Q. Why did you take July, 1921, when there weren't any logs moving?

A. We decided immediately after the last hearing that was held I think in June, 1920, that was held on June 27th I believe, that

we wanted to make a study of that kind. When we left this last hearing I believe it was the intention of the Commission to call another hearing on the 1st of September. We decided the month of July would be the only month we could possibly make such a set of figures—Had we known that the hearing would not have been until this month, of course we probably could have selected another month.

Q. Did you know that July, 1921 would not be a representative month in any sense of the word, would it?

A. Well, from the business just a little before the middle of the month it was almost normal. I am not prepared to say exactly but I imagine it was nearly normal on the income return.

[fol. 600] Q. Didn't you know that practically all of the logging camps were shut down in July?

A. Well, that is possible, but we didn't anticipate they would be, we thought they would start up before the 4th.

Mr. Dudley: We don't claim that this study represents an average situation. To undertake to determine those costs it would require a study of at least a year from every station from which logs were shipped. The purpose of this exhibit is primarily to bring out clearly I think, that there is a special terminal charge which would be constant regardless of the length of the haul, whether it be a five mile or 25 mile haul, the inital and delivery charges would be substantially the same. Of course, they would vary from every camp, possibly from month to month, and it is to emphasize that fact rather than for statistical purposes that we are preparing to introduce this exhibit by this witness.

Mr. Henderson: We object to the introduction of the exhibit because it is admitted that it is not representative.

Mr. Dudley: It has not been offered yet.

Mr. Henderson: I beg your pardon.

Mr. Dudley: Just one question, in making up this exhibit you thought it necessary to allocate a certain amount of charges, you couldn't figure them out directly to the log movement, they would be allocated over average months—take for example—station expense——

A. Well on station expenses we took the billing clerk's and yard checker's account, and things of that kind, where they have any, [fol. 601] and divided that direct down to logs, first the average amount of time that they would spend per day in such work, and divided that on the number of waybills or expense bills as the case may be and then we allocated the balance of it on the regular proportion.

Q. Now on train crew time, how did you do that?

A. That would be direct, where they handled exclusive logs; where they handled logs exclusively we charged it directly to the logging service. Where they handled it by mixed train—by that we mean all freight excluding logs, we divided that on the basis of gross ton miles.

Q. Now did you find it possible to allocate with accuracy all figures which should be chargeable to the log traffic?

A. Well no, not with absolute accuracy, no.

Q. I will ask you whether in your judgment the figures shown there are too high or too low.

A. You mean the money figures?

Q. No, I mean if we could figure out absolutely the actual initial and delivery expenses.

A. No, we could not.

Q. In your judgment of those expenses, greater or lower?

A. The initial terminal and delivery cost would probably be greater than shown here, probably be materially greater, undoubtedly would be.

Mr. Henderson: Now with reference to the exhibits 24 and 25, in 25 you show the bills that were rendered to the loggers for 1919 and 1920?

A. Yes, sir.

Q. Total 16,129, is that correct?

A. Yes, sir.

Q. Did you take into account in your exhibit 24 these bills that [fol. 602] were rendered in 1919?

A. In 1919?

Q. Which you have on exhibit 24 from April to September, the cost of repairing log flats, and on exhibit 25 you have bills that were rendered to the loggers to damage for equipment?

A. On exhibit No. 25 we have the amount divided by year; also in the year 1919 it was $3,000.30, and in 1920 $3,023.22.

Q. What I wanted to know was if in making up the exhibit 24 you took into consideration the bills that were rendered to the loggers in those months?

A. In 1920 we only applied the 1919 receipts to the 1919 expenses, naturally. In other words, we didn't apply any bills we made in 1920 to this exhibit 24 which shows the cost of 1919.

Q. I mean your exhibit 24 covers only from April to September 1919?

A. Yes, sir.

Q. Now your exhibit 25 covers the year 1919?

A. We apportioned it for those months in 1919.

Q. You took that into consideration in making up exhibit 24?

A. Yes, sir. In other words, we didn't take the entire year of 1919.

Q. Your figures here show the dates the bills were rendered?

A. No, they don't show the dates the bills were rendered, but the dates they were paid.

Q. When you made up these figures in exhibit 24 did you only [fol. 602½] take into account the money you had received in those months or did you take the bills which were rendered during those months?

A. No we took the amounts that were billed for damages in those months; we might have rendered a bill in those months, but the damage occurred before that, we would not take that into consideration.

Q. I mean the bills you rendered for damage from April to September, did you deduct those months from exhibit 24?

A. Exactly.

Q. So that exhibit 24 shows what it cost to repair the flats?

A. What the net cost is, yes.

Q. Then these figures on Milwaukee's exhibit 24 are not what would be shown on your books as the cost for repairing logging flats, would they?

A. They would be in this way. We charge to account 314 these repairs to freight cars, all the expenses of repairs to freight cars. If the cars are to be rebuilt these expenses of rebuilding, such as expenses of repairing foreign line cars, under M. C. B. rules, and also repairs to log flats such as we are discussing now, that is credited to 314, so that at the end of the year your net amount to 314 is the amount that it cost you.

Q. That is, you credit to 314 what you collected from these loggers?

A. Yes, sir.

Q. You credit them as you get the money?

A. No, they are credited as the bills are audited.

[fol. 603] Q. Are the bills audited at the time they are sent out?

A. They are audited prior to the time they are sent out.

Q. So that the credit is made whether you get the money or not?

A. Yes, sir.

Mr. Dudley: In this study Mr. Henderson has called attention to the logging business as selected during the month of July, I will ask you whether in making that study you made a separate study for each month.

A. Well, naturally the figures which were worked out that way as a separate study were a separate study for each month.

Q. So that it would not materially change your results if during the month of May there were 10 camps in operation and in the month of July only one, your July study would reflect as accurately as you could get the cost of the operation of that camp in July.

A. As far as the actual charges are concerned it would be the actual amount spent, and it wouldn't make any difference as far as those services were concerned whether there was one camp running or 50 camps.

The Director: We will take a recess until 1:30.

1:30 hearing continued, all parties present as before.

[fol. 604] E. C. GIBBS, a witness produced on behalf of the respondents, after being first duly sworn, testified as follows:

Direct examination.

Mr. Dudley:

Q. Will you state your full name and your business to the commission?

A. E. C. Gibbs, assistant engineer and accountant of the Accounting Department.

Q. I hand you Milwaukee company's exhibit #27 for identification, and ask you to examine it.

A. I have a copy of it.

Q. Did you prepare that exhibit?

A. I did.

Q. Will you explain to the commission just that was prepared? You testified that you prepared it.

A. Why, as Mr. Greengard has testified, certain forms were sent out to the various parties to indicate thereon the time consumed on the part of the trainmen and the various items of initial and delivery cost to-wit, to agent, and other parties, and I compiled those from those reports and allocated to the initial and delivery cost that direct from those reports, and another item allocated on the pro rata basis; that is to say, in case of fuel we conveyed the daily consumption to locomotive miles on the basis of 6 miles per hour, as prescribed by the Interstate Commerce commission and use that as a basis of pro rating our fuel and oil, etc.

Q. Just state a little more fully what the data was that you had.

A. Well, in the case of engine men and train-men we have the time consumed in this initial and delivery cost, such as stopping [fol. 605] and picking up and dumping, and that was allocated direct, the time consumed and the money paid.

Q. Now a few of you say you allocated on the time basis?

A. No, rather on what you might say the locomotive mileage basis. That is, we had the total locomotive miles in the logging service and taking the time consumed in this initial and delivery cost, we converted it into the basis or on a basis of six miles per hour on that proportion, and we pro rated the coal and fuel——

Q. Take this item 314, freight train car repairs, how did you get that item?

Mr. Henderson: This is the exhibit that we objected to and we would like to see it.

Mr. Dudley: Taking each item in turn.

A. Now 314 is the first.

Q. Yes.

A. Well, I had—you might call it locomotive car miles or daily movement and the proportion that bore to the total locomotive miles

in the logging service—we use that as a break down in 314; the trainmen was direct from these reports.

Q. Train supplies and expenses?

A. Using that the same as on a locomotive mile basis.

Q. Now in 308 steam locomotive repairs.

A. Likewise.

Q. The locomotive car miles?

A. Yes.

[fol. 606] Q. And there is nothing under the other locomotive repairs?

A. No, that is allocated.

Q. Now the fuel for train carloads?

A. The same thing, locomotive miles.

Q. Your next is 197.

A. Water.

Q. That is direct?

A. No, that was locomotive miles.

Q. And lubricants and other supplies, the same?

A. Yes.

Q. Engine house expense?

A. The same.

Q. And your maintenance of way and structure?

A. Well, maintenance of way and structure, we base that upon the allocation that we have made before, both direct, and a small amount was based upon the locomotive miles, that gives a certain per cent of the total and we used that break down for maintenance of way and structure?

Q. And the balance of maintenance of way and equipment?

A. The same.

Q. Traffic?

A. Traffic we considered to initial and delivery.

Q. Just what do you mean by traffic? What do you take care of by that item?

A. That is the Traffic Department expense, that is the general account traffic.

Q. And the balance of transportation?

A. We used that in the same method. What we couldn'- allocate [fol. 607] we used in basis of what we had allocated?

Q. The general?

A. Likewise.

Q. And the transportation for investment was allocated the same way?

A. Yes sir.

Q. Your taxes, how are they allocated?

A. On the known taxes we used that same basis it bore to the total.

Q. That is, you took the allocation of the log transportation to begin with?

A. Yes sir.

Q. You then allocated the terminal charge on what basis?

A. On the basis of the known allocation up to that point. There was certain things we could not allocate direct.

Q. You took the percentage of the other items that were given you and then divided the percentage on that basis?

A. Yes sir.

Q. That exhibit simply shows the operations on the Tacoma-Eastern for the month of July?

A. Yes sir.

Q. Now is it possible to figure out exactly and accurately the initial and delivery charges on any commodity?

A. I don't believe so.

Q. This is as full an attempt to it as you can come to?

A. Yes sir.

Q. And those would vary from month to month on the Tacoma-Eastern perhaps and would be different on the Northern Pacific or [fol. 608] any other road, or on any other division of the Milwaukee road?

A. Yes sir.

Q. That gave you a per cent of initial and delivery cost you show at 48.37 per cent of the total cost. The total cost is based on what mileage average haul, do you know?

A. No, I didn't get that average haul—just the Tacoma-Eastern average haul.

Q. I mean on which the 48.37 per cent was arrived?

A. No, I didn't get that.

Q. But it would be 48.37% of the average haul on the Tacoma-Eastern for the past month?

A. Yes sir.

Mr. Dudley: We offer that exhibit No. 27 in evidence.

Mr. Henderson: May we interrogate further on this exhibit before it is admitted?

The Director: Yes.

Mr. Henderson: There are many of these percentages that you arrived at by taking the percentage of the total business for the month of July, or the total car miles or gross tons, or some percentage of that?

A. You mean by making the allocation as between the line haul and the initial deliver-?

Q. Yes.

A. Well, as I say, we took what we could, what we might say we could in a positive way break down, and we know a part of them are initial and delivery cost.

Q. Now you know that the month of July was the month in which practically all of the logging operations on the Tacoma-Eastern of any consequence were shut down?

[fol. 609] A. I don't know that of my own knowledge, No sir.

Q. Did you make any study of the movement of logs in the months of July or any other month?

A. No sir.

Q. Then if it is true that in the month of July the logging operations on the Tacoma-Eastern were practically all shut down, this would not be a representative month at all, would it?

A. I don't know as any one month would be representative for a longer period.

Q. So if your movements were heavier during other months, much heavier than they were during July, the analysis for the month of July would not give any basis for comparison would it?

A. In developing this percentage of——

Q. In developing this cost relationship, or cost?

A. No, I don't suppose it would.

Mr. Henderson: We object to the introduction of the exhibit. It is admitted that it is not representative of anything and doesn't have any purpose.

Mr. Dudley: I desire to ask another question, if the commission please. The cost and expenses which you allocated directly by breaking them down in the manner you have related, applied to the actual movement upon the Tacoma-Eastern in that month?

A. Yes sir.

Q. And it would not have made any material difference — there had been double the number of movements or not, the ratio would remain substantially the same.

A. I think the ratio would remain the same.

[fol. 610] I cannot see where the volume would materially affect relationship between the initial cost and the line haul.

Mr. Dudley: We will renew our offer.

The Director: I notice this stated on the exhibit 1920, I understood it was for 1921.

Mr. Dudley: No, it says "National Park Branch 1921" at the top.

Mr. Henderson: Do you think the unit of cost decreased as the volume of business increases?

A. Well, you mean the cost of the whole?

Q. Yes.

A. As a whole, yes.

Q. And you have the cost as a whole in here?

A. Oh yes.

Q. So that if there had been a much larger log traffic in the month of July than shown here, then the cost would decrease?

A. As a whole, yes.

Q. And if the cars had moved in trainloads instead of single car movements, the unit cost would have decreased very materially?

A. Yes, you would be getting a higher per cent then because we have directly allocated the daily movement and volume would not materially influence that per car, we might say. The volume would lessen your cost probably on the line haul, but your actual operations, the spotting, loading, dumping, etc. the time consumed for car, remains not exactly the same.

Q. Well, for instance, if you were moving on the Tacoma Eastern [fol. 611] where you went in with a block of ten or 15 cars in a string instead of taking up the various cars one at a time, if you probably had to take hold of a string of cars and picked a car out and spot the rest your time element in there would be very materially reduced, if you were handling them in large lots, wouldn't it?

A. To that extent.

Q. So that unless the volume of traffic moving in July in the logging business was normal this study for the month of July would not be representative of the total cost per car or per car mile in the logging traffic, would it?

A. I couldn't say as to that because Idon't know what their practise was, whether if they had a great number of cars, whether they would handle them all in one movement or not; whether they would make more switching with a full train, or even then break it — put into parts to make the movement.

Q. But at any rate the volume of traffic would materially affect the unit cost?

A. I would not say materially, I think you mean greatly.

Q. Yes sir, I mean very considerably.

A. I- wouldn't hardly that in this initial and delivery cost, it would on the line haul yes.

Q. And on the switching wouldn't it?

A. Well, if your assumption is right, that if they had 20 cars they would handle the whole 20 at once rather than handle eight or nine or ten at once, it would include it to that extent.

Mr. Henderson: We have no objection.

The Director: It will be admitted.

(Marked No. 27.)

Mr. Dolphin: You say interest on investment and equipment, is [fol. 612] that 6 per cent interest?

A. Yes sir.

Q. And also on in the investment as a whole?

A. Yes sir.

Mr. Henderson: In allocating your investment was that pro rated on the gross ton mile basis?

A. Well no, that was broken down on the car mile basis.

Q. And not on the gross ton mile basis as in some of the other exhibits?

A. I don't know what was used in other exhibits, but this was the car mile basis.

Mr. Da Ponte: Does this 48.7% of the cost which was assigned to the initial and delivery cost remain constant regardless of the volume of traffic or the distance moved?

A. Well, I don't know that I am qualified to answer, it depends a little—if there is a maximum number of cars that they handle in a switch operation, even though they have more to handle, I would say yes. Wherever possible that is the actual time consumed in

performing the initial and delivery cost for the volume that there was in July.

Mr. Da Ponte: Well now, that initial and delivery cost, does that include all of the items of cost assignable to the terminal?

A. Well, whatever we could identify directly yes, and indirectly on the basis of what we had allocated direct.

Q. So that this 48.37 per cent is what you understand to be the initial and delivery cost of transportation, and the other 52 per cent approximately would be the line haul cost?

A. Yes, that is the ratio they bear to each other.

[fol. 613] Q. So that if the movement is ten lines or 100 miles the ratio of cost to that movement would be about 48% of the total cost?

A. I would consider so.

Q. And I think I understood you to say that it doesn't matter whether July was a heavy or light month so far as the percentage of cost is concerned applicable to the terminal and initial services?

A. In a way, yes. If we had been able to directly allocate it all I could make a positive answer as to that. And if those items I am allocating there in that month were heavier or lighter due to the volume, it might affect it.

Q. But would that be substantial?

A. I would not think so, so far as the initial and delivery cost was concerned.

Q. So that under all the circumstances your idea is that it represents in excess of 48 per cent of the total transportation cost?

A. At least 48.37 per cent.

Q. And this exhibit then is intended to illustrate the reason that the per car mile would be greater for short and a long haul?

A. Yes sir.

Q. And the reason why it would have to be in order to pay the fixed charges imposed—

A. Yes.

Q. And that is the purpose of this exhibit?

A. Yes.

Mr. Henderson: Now along those lines, is it your intention to say that the initial cost of delivery or per cent of initial and delivery [fol. 614] cost to the line haul or to the entire transportation charges are the same irrespective of what the line haul is?

A. No, I wouldn't say that.

Q. So that the question of the per cent of the cost would vary with the line haul, wouldn't it?

A. Yes, if there is anything that materially increases the line haul to a certain extent.

Q. So that the initial cost remains fixed irrespective of what the line haul is?

A. Yes sir.

Q. So that the question of the per cent of the entire cost is not material because it is dollars and cents that fixes the in-tiating and delivering of the traffic?

A. Yes sir.

Q. So that the percentage does not clearly mean anything does it?

A. Well, possibly no, if the average haul increases materially it would make some difference in that percentage whatever the extent of the increase was.

Mr. da Ponte: Of course, that is perfectly true. That is not what I was trying to prove, but on the particular haul involved on the Tacoma-Eastern, on this particular portion, those expenses 48.37 per cent, was the expense for that particular haul?

A. Yes sir.

Q. And that wouldn't vary on the Tacoma-Eastern in proportion as the traffic was heavy or light?

A. I wouldn't think so to any great extent.

[fol. 615] Mr. Henderson: Supposing we were going up and operating from the West Port Logging Company's operations 60 miles away, and during these months you had no operation from those heavy shippers, it would materially affect the percentage when you got into the heavy traffic from those points, wouldn't it?

A. I am not familiar with the topography on that branch. If it materially increased your average haul it would slightly change that.

Mr. Dudley: Calling attention to Milwaukee's exhibit No. —, you are familiar with that exhibit

A. Yes sir.

Q. I want to call your attention to Northern Pacific Railway Company's exhibit No. 18, which shows on the Northern Pacific volume of business there and operating loss of $539,000, plus, considering their Seattle and Tacoma terminals?

A. Yes sir.

Q. The Milwaukee exhibit shows on the Coast and Bellingham division a loss of how much?

A. $97,000 I believe it is on operating expenses—$79,793.76.

Q. Now I wish you would explain how those two exhibits are made up for the purpose of making them comparable.

A. Well, in the Nor. Pac. exhibit #18 they reduced their costs to the cost per estimated loaded car mile on their main line which gives them a cost of $.3791 and on branch lines it is $.3882.

Q. In changing that they took their actual loaded car mileage for all their traffic and their actual empty car mileage for the empty [fol. 616] movement, and added one half of the empty to the loaded car mile on the proposition and the movement of two empties was equal to one loaded car per mile in expense.

A. Yes sir.

Q. Now how did you make up your car mileage costs in exhibit 26?

A. That total car miles?

Q. That gave you how much?

A. On operating expenses?

Q. Yes.

A. It gives 27.78% per car mile.

Q. Now then if that is reduced to loaded car mile basis on the same principal as the Nor. Pac. used what would you get?

A. 37.04 per cent.

Q. Your cost is then greater or less than the Nor. Pacific?
A. On bringing it to an estimated loaded car mile basis?
Q. Yes.
A. Ours is a little less.
Q. Have you determined what effect that would have on your loss?
A. Yes sir, if we had taken our estimated car miles and applied their cost per estimated car miles we would have increased our operating loss $37,835.68.
]fol. 617] Q. Now have you figured out from their exhibit what their car mile revenue was?
A. Their loaded car mile revenue?
Q. Yes.
A. Yes, their loaded car mile revenue is $40.98.
Q. And what is the loaded car mile revenue of the Milwaukee?
A. That is not disclosed here.
Q. No, that is in another exhibit, that is in the point to point movement exhibit?
A. Well, but we based ours on the total car miles.
Q. Well that is diclosed in the exhibit #23 is it?
A. Yes sir.
Q. Now referring to exhibit #23 did you figure out what the revenue per car mile on the Milwaukee was?
A. Per loaded car mile it would be $50.57.
Q. That is how much in excess of the Nor. Pacific?
A. $9.69.
Q. And if the Milwaukee had received exactly the same rate—as the Nor. Pacific had, the same revenue per car mile, how much would you have decreased your loss?
A. We would have decreased our loss—it would have decreased our revenue $158,012.40.
Q. Now if you increase the Milwaukee tonnage to correspond with the Nor. Pacific tonnage in logs what is the effect?
A. Basing it on loaded car miles their volume is 96 per cent greater than ours. In other words, that we have their operating expenses and their revenue, their volume, we would have shown a loss [fol. 618] of $540,258, as compared with their $539,334.

Supervisor Cleland: Yes, that is, if he had had the Northern Pacific expenses in revenue and volume we would have lost a lot more money?

Mr. Dudley: I couldn't answer that question from lack of familiarity of the Northern Pacific figures, but the total volume there is a comparatively small amount. The two exhibits really conform very closely; that is the purpose of that testimony, that altho the two exhibits are prepared by two different roads, yet when the bases are harmonized we find the results are substantially the same.

Mr. Henderson: In other words, it costs the same whether you handle a small amount of business or 96 per cent more, is that the idea?

Mr. Dudley: No.

Mr. da Ponte: The great difference in our showing is the fact

that we find that under the rates in effect—and that is substantiated by Mr. Calderhead's exhibit, that the Milwaukee rate is 7 as compared to 5½, that is, they are that much higher as the difference is from 5½ to 7. The Milwaukee rates are a good deal heavier than ours, and that is where the great bulk of it comes in. In addition to that they show this slightly higher expense per mile, which he testified was about $37,000 higher on the total operation. We think the Milwaukee is giving us the better of it, because we don't think it is that much; but the great reason that the revenues of the Milwaukee are higher than the Northern Pacific, more than any other thing, is that while the Milwaukee's loaded cars are about 30 per cent [fol. 619] or about that less than our loaded cars, their car miles are 96 per cent less; that is, ours is 96% greater than the Milwaukee's because our average mileage is 31 and the Milwaukee's, as shown by Mr. Gray's last figures, is only 23, so that while we carry 20 per cent more cars than they do we have 96 per cent more car miles, so that the two things practically coincide in net results of operation.

Mr. Dudley: I want to call your attention to this exhibit prepared by Mr. Calderhead, I don't know the number of it.

Mr. da Ponte: It is marked "Calderhead's exhibit." The other one was marked "Commission's exhibit" and the other is marked "Carlderhead's exhibit."

Mr. Dudley: Calling your attention to this last page, which shows the average haul on the different roads and the average rate per thousand, as I understand it, for the haul, I understand, Mr. Calderhead that when you say the average rate there you mean average revenue. That is on the last page.

Mr. Calderhead: The average rate and the average revenue would be the same on this exhibit.

Mr. da Ponte: As between the Northern Pacific and the Milwaukee? Mr. Calderhead: yes.

Mr. da Ponte: No, because the average mileage is 23 and ours is 30.

Mr. Dudley: No, you misunderstand Mr. Calderhead. Mr. Calderhead in the exhibit used the word rate, I asked him if the word rate was equivalent to the word revenue.

[fol. 620] Mr. da Ponte: Oh yes, I see.

Mr. Dudley: Now, Mr. Gibbs, on the Nor. Pacific with a mileage of 31.3 miles as shown on this exhibit and an average revenue of 1.834, what would be the average rate per mile?

A. It would be 5.8 cents.

Q. And with the Milwaukee having an average revenue or rate of $1.781 on an average haul of 25.4 miles, the average revenue or rate would be what per mile?

A. 7.01 cent- per mile—virtually 7 cents.

Q. Using the same figures on the Great Northern and the O. W. R. & N. you would find that the Great Northern and the O. W. R. & N. rates per mile are greater than either the Milwaukee or the Northern Pacific?

A. Yes sir.

Q. This figure given on the Milwaukee of 25.4 miles, how does that conform with your average haul as shown on exhibit #23?

A. I think it is slightly higher than that, but I didn't develop that only in a rough way.

Q. And you didn't develop the rates from this either?

A. No sir.

Mr. da Ponte: Well, it is indicated there that the Milwaukee's revenues or rates are higher than the Northern Pacific in view of the fact that the Milwaukee's average haul is 23 miles as against the Northern Pacific 31; and in view of your other exhibits which Mr. Henderson objected to a minute ago, isn't it true that that doesn't indicate that the Milwaukee's net results would be better [fol. 621] than the Northern Pacific for the reason that the revenue per mile for a short haul should be greater than the revenue per mile for a longer haul?

A. Yes sir.

Q. So that that does not indicate that the Milwaukee net returns would be better than the Northern Pacific altho its rates are higher, and that indicates that from a net operating standpoint the Milwaukee rates are higher than the Northern Pacific, don't they?

A. No sir.

Mr. Dudley: I desire to call your attention next to Log shippers' exhibit #5, I think it is; it is an exhibit prepared by Mr. Gray and introduced at the last hearing. I call your attention first to the item #2 on page 4, 2nd line where the exhibit shows a total car mileage loaded and empty of the Milwaukee of 47,743,436; I will ask you whether or not that figure conforms to the figures as shown in the annual report of the Milwaukee.

A. They do not.

Q. I call your attention to Milwaukee's exhibit #19 showing the car miles, what is your correct mileage as shown by that exhibit?

A. Loaded and empty car miles are 46,736,134.

Q. So that if that exhibit is correct there is an error in the statement of 47,743,436 of about one million car miles?

A. Yes sir.

Q. And the effect of that error, tracing it down to Mr. Gray's exhibit and the loggers' exhibit will be what upon the cost of opera- [fol. 622] ting per 1,000 gross ton miles?

A. His total gross ton miles would be materially greater, and his expense being the same, he has a larger nu-ber of gross ton miles divided into total money, and he would consequently get a lower cost per 1,000 gross ton than was true.

Q. Now also returning again to the freight operating cost per 1,000 gross ton miles, item #6 in this exhibit I wish you would state just how that was arrived at as appears from the exhibit—that is, in Mr. Gray's exhibit.

A. This item #6 in which his freight operating cost per 1,000 gross ton miles you mean?

Q. Yes.

A. Well he took this 47,743,436 loaded and empty car miles and

assumed that the average weight of 19 ton was right and multiplying that he got the tare ton miles, and to that he added his net ton miles which gave him a total gross ton mile and then dividing that total gross ton mile that applies to the cost of freight operation, he gets an operating cost per thousand gross ton mile of $6.10½.

Q. In making his computation in that way, then he has necessarily used the average cost of operation in the State as a whole?

A. Yes sir.

Q. And for the period of a year?

A. Yes sir.

Q. Now in the preparation of exhibit #26 how was the basis of the cost per 1,000 gross tons arrived at?

A. By the total logging expenses of the Coast and Bellingham [fol. 623] division divided by the total gross ton miles—that is thousand of gross ton miles. That gave you an operating cost on those divisions of how much?

A. $8.338.

Q. Or something in excess of $2.00 more than Mr. Gray has used in his figures?

A. Yes sir.

Q. Which is the more accurate, Mr. Gibbs? The use of the average divisional cost of operation or the state wide cost of operation where the movement is on certain divisions?

A. Well, I would say the divisional cost is more accurate.

Q. And if you apply the cost of operation as determined by the divisional cost basis of $8 and some cents what would be the effect upon the revenues of the Milwaukee as shown in Mr. Gray's exhibit

A. Well you would materially increase the cost of operating by this difference betwen this six dollars and some odd cents and eight dollars and some odd cents.

Q. Wouldn't it show (as shown by Mr. Gray) that you would have a net operating loss?

A. A slight loss, yes, but I have not made a calculation on this exhibit.

[fol. 624] Mr. Henderson:

Q. Now on Mr. Gray's exhibit he specifically states that those were based upon 1919 figures, didn't he?

A. Yes, sir.

Q. For the reason that he couldn't get the 1920 figures from the Milwaukee altho they had been demanded for a long time?

A. I don't know as to that.

Mr. da Ponte: Now Mr. Gibbs you understand that these exhibits of the Milwaukee and the Northern Pacific which have been put in are based on this theory, that the average cost of all traffic on these short divisions, such as the Bellingham division and the Tacoma division has been ascertained, has it not?

A. Yes, sir.

Q. And then the log traffic has been segregated and the number

of car miles has been ascertained and that has been multiplied by the average cost of all traffic on the division?

A. Yes, sir.

Q. Now then, Mr. Gray, instead of using the cost applicable to the particular division where the log traffic moved as taking the average cost of doing business in the state, and multiply that by the log traffic to get the cost; now then, isn't Mr. Gray's theory wholly inapplicable to the traffic which moves only on a single division or two divisions like the log traffic, for the reason that taking the state-wide operations you have an average haul of all the state traffic that the record shows of 100 miles on the Northern Pacific, whereas the [fol. 625] average haul on the log traffic on the Northern Pacific is 30 miles, so that he has applied to a haul of 30 miles the average cost of all traffic for a haul of 100 miles has he not?

Mr. Henderson: Object, unless you qualify the witness.

Mr. da Ponte: I think he is qualified to answer that.

Mr. Dudley: I think so. The evidence shows there is a fixed initial and delivery cost and you prorated that on 30 miles which is higher than it is on 100 miles.

Mr. Henderson: I don't think it takes a witness to testify to that.

Mr. da Ponte: Is that settled?

Mr. Henderson: What?

Mr. da Ponte: That the average cost of doing business on an averaage length of haul of 100 miles doesn't reflect the cost of traffic with an average haul of 30 miles.

The Director: I think you can ask that question, but I think the most of your question is argument.

Mr. da Ponte: Just answer the question I put, is it true or not that the average cost of doing business on an average haul of 100 miles has no bearing upon the cost of doing business which has an average haul of only 30 miles?

A. I would like to answer that question in this way, that if you could limit your study to the divisions where the logs were moved it necessarily follows that you would more truly reflect the cost of logging rather than to take the state-wide cost.

[fol. 626] Q. And that is for the reason that the average haul of logs on this division is substantially the same as an average haul on other traffic on that division?

A. I could not answer.

Q. Well, at least it is more nearly an average haul than it is the average haul of the state-wide business?

A. I would think so, yes.

Q. That would necessarily be so?

A. Yes, sir.

Mr. Henderson: In exhibit #27 I notice you have the initial and delivery cost in round figures, can you reduce that down so that we will know what the initial and delivery cost is in dollars and cents per car, or in some units so that we can eliminate that from the rate including the initial cost of delivery and line haul?

A. You mean reduce it to cost F. B. M. or M. B. M.?

Q. Yes.
A. Yes.
Q You have not got that on this exhibit?
A. No, sir.
Q. You have simply produced the cost per car mile of doing the business?
A. That is the total.
Q. And included in that the initial and delivery cost?
A. Yes, sir.
Q. But you have not shown the commission any way they can take out the initial and delivery cost which doesn't vary and then apply the average line haul rate, have you?
[fol. 627] A. No, sir.

Mr. Henderson: That is all.

Mr. Clifford: Will you please refer again to Milwaukee's exhibit No. 27, can you state what the number of cars or what number of cars #27 is made up from so that we can make deductions from that?
A. The number of cars?
Q. Yes.
A. I cannot from memory, no.
Q. Have you any data that would show the number of cars?
A. I believe I have over at the hotel.
Q. Will you furnish that sometime this afternoon?
A. Yes, I can furnish that.

Mr. Dudley: Will tomorrow morning be just as well? We can get together better in the evening.
Mr. Clifford: Just so it is applied to that exhibit—the number of cars and the average loading per car, is what we want, with special reference to exhibit #27.

M. Nicholson (recalled).

Mr. Dudley:

Q. You are the general manager of the Milwaukee, Puget Sound Lines?
A. Yes, sir.
Q. I call your attention to Milwaukee's exhibit # 19. Will you state the average mile haul per car in the year 1920?
A. The average mile haul for revenue freight was 113.16 miles.
[fol. 628] Q. Now the evidence as shown that the average mile haul of logs on the Milwaukee is approximately 24 miles; some exhibits show a little more and some a little less, what effect would that difference in the average haul have on determining the cost per thousand gross ton miles haul, that is, by comparing one with the other?
A. The cost of the longer haul naturally decreases according to

the length of the shorter haul, being more expensive by reason of your terminal operation entering so seriously into the total operating cost. Now you can spread that terminal cost out with the length of the haul that you have for your shipment.

Q. Then the cost per thousand gross ton mile basis worked up *an* an average haul of 113 miles would not be fairly representative of the 1,000 gross ton miles cost of hauling logs where your average haul was approximately 24 miles?

A. No, it would not be a fair comparison at all for the longer the haul the average decreases per thousand gross ton per mile, or per car mile or any other unit basis you want to use. The shorter the haul the higher the cost by reason of your operating costs and the services in connection with initiating the shipment.

Q. You mean the cost per mile?

A. Yes, sir.

Q. Now you are familiar with this form 215?

A. The operating sheet, yes.

Q. That is gotten out by the accounting department?

A. Yes, sir.

[fol. 629] Q. You receive those each month?

A. Yes sir.

Q. That shows the operating cost on each division for the month?

A. Yes sir.

Q. Now I wish you would explain to the commission the various figures which may appear in that monthly statement.

A. The object of the form that he speaks of is to develop the relative cost for transportation by operating divisions. It shows the statistics which enter into the operation of the railroad and to the business handled and the expense incurred. Now the business handled is represented in net tons, gross tons, and in car miles, engine miles, and various other ways. Those items divided into the operating expense naturally produced certain averages which are indicative of the relative cost of the different methods of determining your operation. Now we take the gross ton hauled divided into your expenses of operating the divisions and that naturally gives you the average gross ton mile cost. For convenience the railroad is divided into operating divisions, and the costs for each operating division are accordingly kept in accordance with the rules of the Federal authorities, and we are in a position through this operating sheet of determining very accurately what our operating costs are in almost any direction. They want to analyze it as an operating division. Now the same thing is true of the railroad as a whole, they are kept in that way, and the cumulative figures for the railroad as [fol. 630] a whole are the ones which appear in our report to the Interstate Commerce Commission. The commission does not require that they be segregated as between operating divisions; that is a railroad convenience in order to develop the relative efficiency and operation of one territory with another, or one set of officers with another. There are certain parts of a railroad where the expense of operation is much greater than others; your expense of operation is very largely influenced by the volume. The expense on the main

line division, for instance where your facilities are more adequate, and the possibility of a heavier trainload is there, you naturally will handle your operation at a lesser expense per mile or per ton or any other direction that you want to use the unit for comparison. On some of the main line divisions where the heavy grades are encountered the expenses are much greater than they would be where the grades are more favorable. On short lines, the traffic is usually much lighter—they are feeder lines to the main line—the expense is much greater than it is on a main line for instance. It is true there is some difference in the character in the maintenance of the track, not being maintained at quite as high a standard as the main line, but what little saving there may be in the difference of maintenance is much more than made up by reason of there being less traffic, and your trainload is lighter and your expense of operation is usually from 1/3 to ½ more on branch lines with light traffic than on a main line with heavy traffic.

Q. Now our exhibit there #26 shows the costs on the Bellingham and the Coast division, I wish you would state to the commis-
[fol. 631] sion just what is comprised in the Coast Division, what is included in the coast division.

A. The coast division takes in the main line territory from Othello, Wn. to Seattle and Tacoma, Wn. as well as the Everett branch, the Hanford Branch, the Tacoma-Eastern Railway, the Willapa Harbor Railway and the Grays Harbor Railway, together with a little branch running from Cedar Falls to Enumclaw.

Q. Now the division next east of that from Othello is eastward—is the Idaho division.

A. Yes sir.

Q. I will ask you whether or not the log haul of the company is not substantially all on the coast and Bellingham division; that is, as compared with the Idaho division.

A. Most decidedly.

Q. The log haul in Eastern Washington is confined almost to interstate business of movement of logs from Idaho into Spokane?

A. Yes sir; and the White Pine territory almost exclusively in Idaho—the Elk River Branch.

Q. Keeping in mind the fact that the log haul business is on the coast and Bellingham divisions I will ask you whether it is proper to use the cost per thousand gross ton miles based upon a state wide computation of determining the cost of moving logs on the Bellingham and Coast division.

A. I would think not at all. The Idaho division in Washington is almost exclusively main line with a very short branch line called the Marcellus branch. The balance of the line is main line. And there is another exception, a part of the Idaho, Washington and
[fol. 632] Northern is a part in Washington and a part in Idaho.

Q. And this Coast division includes the various branches you have enumerated?

A. Yes sir.

Q. So your cost of operation per thousand gross ton miles would be increased?

A. Decidedly, as against main line.

Cross-examination.

Mr. Henderson:

Q. Do you know what the average length of the log haul is on the National Park branch, or the old Tacoma-Eastern?

A. No I do not, Mr. Henderson. We have some figures here from which it could be determined.

Q. It is probably longer there than any other place else, the average haul there?

A. I couldn't say. Our average for the territory is 24 miles.

Q. Didn't you put in an exhibit of cost figures on a 30 mile haul when you were on the stand sometime ago?

A. I believe that was used as an example at the time.

Q. And have you compared those costs figures on exhibit 27 to know that the actual cost compared to what you get is somewhere near twice as much on exhibit 27 as you state they ought to be in your exhibit?

A. I have made no comparison at all with the figures given before.

[fol. 633] Mr. da Ponte: Of course, the records speak for themselves, Mr. Nicholson only segregated some of the costs.

Mr. Henderson: I mean the typical operation.

A. Well, that was just as an indication of specific direct costs on which some very rough calculations were made and the most conservative estimate as to cost for that kind of an operation.

Mr. Henderson: You put in all of your fixed charges didn't you, tho?

A. No sir.

Q. Not all of your fixed charges in your estimate on that?

A. I don't think so.

Mr. da Ponte: That speaks for itself.

A. They were based on direct charges.

Mr. da Ponte: Isn't one of the principal reasons why you cannot apply the cost per 1,000 gross ton miles for state operation with the cost in the particular division because of the fact that your average haul for statewide operation is several times as great as the average haul on the particular division?

A. Yes sir.

Q. And that is one of the reasons why it is utterly impossible to make such a computation of cost?

A. It is not comparable at all.

Q. And the average distance in the state being about 100 miles, using Northern Pacific figures, and the average movement of logs being about 30 miles, does the average cost per 1,000 gross ton miles [fol. 634] of doing statewide long haul business have any bearing whatever upon the cost of doing the log business?

A. It has some relationship, of course, because the cost of the 30 mile haul enters into the cost of the 100 mile haul, but it is not a basis that you can use to segregate the cost of a short haul operation.

Q. It wouldn't reflect that even approximately, with approximate accuracy, the cost of a 30 mile haul?

A. I would not say so.

Q. And that because of the fact that what per cent of your charges are fixed regardless of the volume or the length of the haul?

A. I would say about 60%.

Q. So that in your 30 mile haul you have to absorb that entire fixed charge which doesn't vary with the length of the haul?

A. Yes sir.

Q. And on your long haul you simply have a greater factor to divide this 60 per cent of fixed charges by, which will of course make it much less then when you divided by the short haul?

A. Yes sir.

Q. And has it ever been known in railroad accounting to figure costs in any such way as Mr. Gray's exhibit has set forth, that you have heard of?

A. Not that I know of.

Mr. Henderson: In addition to what Mr. Da Ponte spoke to you about, the average haul and the gross ton capacity, I think you stated that it was not fair to use the gross ton cost on logs as compared with the gross ton of other traffic costs, because other traffic had a [fol. 635] much longer haul than the logs, is that right?

A. I said it was not a fair basis to use.

Q. And likewise in comparing any gross ton costs or any specific cost on any commodity in order to get at an accurate figure you would want to get at the bulk too wouldn't you?

A. Yes sir.

Q. So that when you get down to the average ton of logs they are about as compact as anything that is shipped?

A. As far as bulk is concerned.

Q. The bulk enters into the cost of moving it, doesn't it?

A. To some extent.

Q. For instance, if you had a ton of feathers, you couldn't ship that as cheap as a ton of coal because it would take so much more equipment, isn't that true?

A. Possibly.

Q. So we are taking the average gross ton of logs and they are more compact than the average traffic that you use and that you handle, aren't they?

A. I couldn't say to what extent, because we handle other compact traffic.

Q. They are more heavily loaded per car than the average car, aren't they?

A. No, I wouldn't say so.

Mr. Dudley: Mr. Nicholson, Mr. Henderson inquired about exhibit #16, the 30 mile haul, for the purpose of refreshing your rec- [fol. 636] ollection as to that matter, I call your attention to exhibit six.

Mr. Da Ponte: Is that the typical operation?

Mr. Dudley: Yes.

Mr. Da Ponte: Well, that is all explained in his testimony.

A. That is all pretty well set out, what Mr. Henderson referred to. I don't see any fixed charges in here other than just some interest on the equipment.

Mr. Henderson: Haven't you taxes in there?

A. Yes sir.

Mr. Da Ponte: You have about one-tenth of the taxes in there.

Mr. Henderson: Of course, I think you have about one-tenth of your revenue.

Mr. Da Ponte: I know what your tax is here. His evidence shows very distinctly that he didn't set up——

Mr. Clifford: Will you refer please to exhibit #26 again and also #27, are terminal costs included in those showings?

A. Yes.

Q. Well now, the Coast division and the Bellingham divisions are terminal divisions are they not?

A. Not at all. Our coast division is about the biggest division we have west of the Missouri river?

Q. Well the coast division according to your statement include that line from Othello to Seattle and Tacoma, and also includes the Everett Branch and Hanford branch, the Tacoma-Eastern and the Grays Harbor branch, and the Willapa Harbor branch.

A. Yes sir.

[fol. 637] Q. Does it include the line on the Olympic peninsula?

A. No sir.

Q. Well, as far as that division is concerned it is pretty heavily burdened with terminals, more so than a division inland.

A. What sort of terminals do you refer to?

Q. Freight terminals.

A. We have Tacoma and Seattle which are our largest terminals on the lines west, located on the coast division. Then of course we have a terminal to each train operation on these various branch lines, and we have an intermediate terminal at Chehalis, which is half way between Tacoma and Portland.

Q. Now isn't it an acknowledged fact in railroad traffic study that terminal divisions are more heavily loaded with terminal expense than what you might call an intermediate division?

A. That is quite true, yes.

Q. And when you take the coast division and the Bellingham division and figure cost without making some allowance for the extra loading of the terminal cost, isn't the showing to that extent unfavorable to the traffic that moved?

Mr. Dudley: I will object to that for the reason that it is incompetent, irrelevant and immaterial, because terminals costs as we shall contend, are proper to be considered in connection with the operation. In other words, you could not cut out Seattle and Tacoma and have any railroad trains, so that we have to consider that, and you have to allocate them of course proportionately.

[fol. 638] Mr. Clifford: We are not contending that terminal costs

should be excluded. We are contending that taking the total traffic that moves over that railroad that it is unfair to in any particular portion of that traffic to accept the cost on a terminal division as applying exclusively to that traffic without making some allowance for the fact that it is a terminal division, and includes terminal costs which are also incident to a long line haul comparing the Bellingham division with the Coast division. Now the relationship of car miles is about six times as great on the coast division as it is on the Bellingham division, and the comparison of expense is about four times as heavy on the Coast as it is on the Bellingham, so the difference is not very great in total operating expenses on the Bellingham division with very little expense against the Coast division with Seattle and Tacoma terminals therein. In other words the terminal cost of handling business at the one terminal at Bellingham on the Bellingham division is not so much out of line with what the cost is on the Coast division with these two big terminals.

Mr. Clifford: But it is a general proposition isn't it that you have to take the terminals into account on the terminal division as loading costs generally?

A. Well, it is a question of how much it loads the total operating expenses because you have to have an organization to handle business scattered over a pretty big territory in a territory like Seattle. Now naturally it is a little more expensive to supervise a more expensive operation like this where it is all switching movements than it would [fol. 639] be in a small terminal like Cle Ellum, where there is very little work there.

Q. That latter statement would explain the statement you made a little while ago when you made a comparison between Seattle and Bellingham and the Seattle terminal and the coast.

A. Yes, but I don't think it is surprising at all between the two divisions. It is impossible to segregate very accurately terminal expenses from your road expenses.

Q. No doubt, but all the traffic that moves through a terminal should bear, shouldn't it, as near as could be determined, its fair quota of that terminal charge?

A. Sure.

Q. For instance, you receive silk shipments from overseas and you make use of the Seattle and Tacoma terminals to ship that *silk* to the east, now that shipment certainly should bear its quota of the heavy terminal charge?

A. It does.

Q. But when you confine your showing to a terminal division you don't assign it pro rata to that particular movement?

A. You mean if Seattle was a separate operating division that the terminal expenses wouldn't go into the road division adjoining Seattle, is that what you are getting at?

Q. I mean when you consider a terminal division alone without making allowance for the fact that it handles long as well as short haul traffic then you are unduly loading the short haul traffic with the terminal charge?

A. Why I cannot get at what you are trying to develop.

Mr. da Ponte: If you are thinking of the Northern Pacific with which I am more familiar, the part of the expense assigned to the [fol. 640] log traffic was based on the number of cars of logs in the terminal as compared with the other. It was only charges its proportion and then we had another segregation which excluded the terminals altogether.

Mr. Clifford: Well, he doesn't so show on exhibit- 26 and 27.

Mr. da Ponte: He didn't prepare that exhibit.

Mr. Clifford: He says that he couldn't make such a segregation.

Mr. da Ponte: Yes, he takes a number of cars and only gives it that percentage.

Mr. Clifford: Perhaps that will be more apparent tomorrow morning when Mr. Gibbs furnishes the statement that he is to prepare.

Mr. da Ponte: Ours on that basis would show 10 to 15 per cent and we excluded the terminals and all that property absolutely.

Mr. Clifford: You are familiar with the make-up of exhibits 26 and 27 so far as the revenue portion of the statement *are* concerned?

A. Well, I didn't take much of a hand in preparing these statements, but I am familiar with them in a general way of course.

Q. Are you familiar with this, that as far as revenues are shown on 26 and 27 they are pro rated to the divisions on the basis of mileage?

A. I presume as far as the percentage on logging business is concerned it can be credited direct to each operation by division.

[fol. 641] Q. And so far as the expense is concerned that is expense incurred in the terminal division?

A. That is expense for the coast division and the expense for the Bellingham division, that could *could* be allocated to a logging operation. Now the details of determining the proportion of operating in Tacoma yards, for instance, that should be chargeable to the logging operations in Tacoma terminals; I presume that they used a different basis to determine what proportion of that terminal expense should go to logs as compared with what should go to total shipments.

Q. Here is the proposition, you are taking the total terminal expense within that division are you not?

A. I don't know, I cannot say.

Q. All right, we will get that from Mr. Gibbs.

Mr. Dudley: A large part of that Tacoma-Eastern logging movement used the Tacoma terminal do they not?

A. I don't know just what proportion but we handle quite a number of logs into Tacoma proper off from the Tacoma-Eastern; some log movements go to the local mills along the line.

O. P. KELLOGG (recalled).

Direct examination.

Mr. Dudley:

Q. Calling your attention to exhibit marked Milwaukee's 28, I will ask you whether you prepared that exhibit?

A. I had this exhibit prepared under my direction, yes.

[fol. 642] Q. What does this exhibit show, Mr. Kellogg?

A. This exhibit is a comparison for information purposes of the distance through rates on logs as carried by the Milwaukee railway and other commodities in this territory which have distance rates applied to them. For instance we named the distance tariff rates on logs on our Bellingham Branch, or the Tacoma-Eastern Branch and on the Coast division, and compare those distance rates in dollars and cents per 1,000 feet as compared with the rates on slab wood in dollars and cents per cord, and on lumber, sand, brick and vegetables in cents per cwt. We have then taken and shown the average car earnings using the average footage found by our exhibits in this case and showed the car earnings for logs under each of the scales referred to, and have taken an average minimum of 18 cords in arriving at the car earnings on fuel wood and the average minimum weight on lumber, using a 40-foot car as a basis; and on sand and brick, potatoes and onions, have used the tariff minimum weight, arriving at car earnings and showing the corresponding car earnings for each group of distances from five to 50 miles.

Q. The slab wood rate and the cord wood rates, how are they established?

A. The slab wood and fuel wood rates were established after a hearing before the Interstate Commerce Commission and the Washington Department of Public Works, and where established in compliance with the order of the Interstate Commerce Commission and the Department, as referred to in this exhibit, references to the cass are given by notes in the exhibit.

[fol. 643] Q. So the rates there on that exhibit were fixed as a reasonable and proper rate for slab wood, cord wood, etc. by both the Interstate Commerce Commission and the Department of Public Works of Washington?

A. Yes sir.

Q. When was that decision handed down?

A. In April—on April 18th, 1921, by order of the Department, in cause #5150; and in March 26, 1921 by the Interstate Commerce Commission in I. & S. docket #1251.

Mr. Dudley: For the purpose of the record, if the commission please, in case htis case should go into court, I desire to offer in evidence a copy of the decision of the findings of fact and order of this Commission and of the decision of the Interstate Commerce Commission in the slab wood case.

Mr. Henderson: Objected to as incompetent and immaterial.

Mr. Dudley: The interstate Commerce Commission has held that

the very best evidence on the comparison with rates which the commission itself has established after hearing has reasonable rates. If this case goes into Court you have to have your records in court, you are not supposed to take anything but what is a matter of record here, so that the court in reviewing the entire question can see the same thing.

Mr. Henderson: If the commission please, we might as well introduce some evidence on Hay and Grain. There is nothing here to show that there is anything connecting slab wood as a product of logs; so is sawdust and cedar hog fuel. You might as well introduce [fol. 644] that. That has nothing to do with logs except to show——

Mr. da Ponte: You admit that is of less value?

Mr. Henderson: I don't know anything of the value.

Mr. Dudley: The slab wood is a waste product same as hog fuel, and if the commission has fixed reasonable rates upon that that becomes strong evidence of what would be a reasonable rate upon logs, they are not dependent upon the movement by train for their value. Now the evidence shows that the rates fixed by the Department are in excess of the rates on logs.

Mr. Henderson: That may be shown by the exhibit but the introduction of a record of that kind of a hearing would be encumbering the records. We will have a record here that we will never get through with.

The Director: I think if counsel stipulated that these rates on slab wood were fixed by order of the Interstate Commerce Commission it would be unnecessry to encumber the records with the order.

Mr. Dudley: If your honor desires to sustain the objection, of course, we will not insist, and reserve our exception.

The Director: I was merely suggesting that you could get the same matter into the record by stipulation instead of encumbering the records with these orders.

Mr. Henderson: I think the exhibit itself, which is in the record, shows they were fixed. It states so on the exhibit and states the number of the decision which was referred to and the part of the decision which was referred to, now what is the use of introducing [fol. 645] that book into the records when it is already referred to here as a part of an exhibit. The book will show for itself that it is in there, and the courts usually read the decisions of the Interstate Commerce Commission.

Mr. Dudley: The facts found by the commission are a part of the decision, and a stipulation would not cover it. The testimony which was established as a result of a hearing doesn't cover, and that we are entitled to have in the records, and that is the reason we offer this in evidence.

The Director: They will be admitted.

Mr. Henderson: We object to them unless they are certified as not being proper. Certainly unless they are properly authenticated and certified they cannot be introduced in this hearing. That is a typewritten copy and I don't know whether it is right or not.

Mr. Dudley: We will have the commission certify their own,

unless the counsel is willing to take the copy which has the Interstate Commerce decision in it. I will testify that I compared this with that.

Mr. Henderson: I may have to pay for a record in this case and I don't want to have to pay for that.

Mr. Dudley: Will a typewritten copy of the Interstate Commerce Commission's decision be satisfactory?

Mr. Henderson: It will have to be. I don't know that the report of the decision of this Commission will be satisfactory but it will have to be when I get it. If the Commission please, I am simply trying to hold the record down to a reasonable length, and I don't [fol. 646] know where we are going to get. If the Director please, I don't think that the supplemental order of the Commission is here; it is not complete.

Mr. Dudley: The supplemental order of the commission says they were without jurisdiction.

Mr. Henderson: We want it all in the records.

Mr. Dudley: I offer exhibit #28 in evidence.

Mr. Henderson: We move to strike the copy of the Public Service Commission's findings of facts and order unless the supplemental order is included with it.

A. The supplemental order is not effective yet.

Mr. Henderson: It is for the reasoning of the Commission that counsel referred to.

Mr. Dudley: Certainly we introduced a good reason and they are going——

Mr. Henderson: We insist on the whole thing going in.

Mr. Balmer: The fact is, that the supplemental order if it becomes effective will give the carriers less revenue on the class of traffic covered by the supplemental order per car, than the per car revenue you have shown on this exhibit.

A. It would on certain specified classes of traffic.

Mr. Welsh: I object to that.

Mr. Balmer: Was there a ruling on Mr. Henderson's objections? Mr. Henderson made a later motion to strike.

The Director: If Mr. Henderson, or any one else, desires to file a supplementary order we will receive it, we cannot compel the carriers to put in supplemental orders.

[fol. 647] Mr. Henderson: I don't think the court will pay much attention to it.

Cross-examination.

Mr. Clifford:

Q. In your statement #28 comparing slab wood and fuel wood with lumber, sand, brick, potatoes and onions, how did those rates with which you compared them originated?

A. I am not in a position to tell you the original reason for the establishment of those distance rates. They were rates that were in effect when the Milwaukee Railroad built into this territory and were adopted by us, with every commission made rate, but I don't know—I believe so, that the vegetable rates are commission or legislature made rates.

Q. Well so far as your line was concerned, the Milwaukee, they were not commission made rates?

A. No, they were not.

Q. You adopted the rates of the other lines?

A. We adopted the distance tariff rates that were in effect on the other line in the same territory.

Q. So far as you- rates were concerned these were non-competitive?

A. Not necessarily, there would be many cases where they would be competitive. In fact, there are very many cases where our line purchased other lines.

Q. These were the voluntary rates, however, upon your line upon entering the territory?

[fol. 648] A. Yes sir.

Mr. Dudley: They were put in for competitive reasons. As he says, there would be many cases where the rates would be competitive because our line was parallel to the other lines in lots of places in this territory.

Q. Log movement is on Grays Harbor and Willapa Harbor and the Tacoma-Eastern are they not?

A. I believe Mr. Clifford wasn't speaking of the log rates but of the other commodity rates, the lumber, sand and gravel.

Mr. Carey: Then this entire exhibit of yours shows the number of carloads of slab wood that moves as compared with the number of logs?

A. No.

Mr. Carey: The number of cars of logs moved exceeded the number of slab wood many times over?

A. Oh yes.

[fol. 649] G. H. PLUMMER, being first duly sworn, testified as follows:

Examined by Mr. Da Ponte:

Q. What is your name?

Ans. G. H. Plummer.

Q. What is your occupation?

A. Western Land Agent, Northern Pacific Railway.

Q. You have charge of the timbered lands of the Northern Pacific Railway, sale of them?

A. Yes, sir; for the states of Washington, Idaho and Oregon.

Q. I will ask if you have had an investigation made to determine the average price of logs over a period of years?

Ans. Yes, sir.

Q. State where the information was obtained?

A. The information which I have prepared has been collected by me for a number of years, part of it from government records, and part of it from the records of the Association.

Q. Loggers Association?

A. Loggers Association, and part from the Department of Commerce and Labor, reports.

Q. Were the loggers interviewed in this State?

Ans. Yes, sir.

Q. For instance, which one of them?

A. The only logger that we interviewed was a logger who handled some of the logs for the Old Town Mill years ago before any record was kept of the market prices of logs on Puget Sound.

Q. Have you prepared an exhibit giving the market prices of logs on Puget Sound, Grays Harbor, and Columbia River for the years 1896 to 1920?

Ans. Yes, sir.

Q. Please state, Mr. Plummer, calling attention to Northern Pacific Exhibit No. 31, what the range of prices was from the year 1896 to the present time?

A. The statement shows the market prices of logs on Puget Sound, Grays Harbor and the Columbia River from the year 1896 to 1920 [fol. 650] inclusive. On Puget Sound the prices ranged from 1896 to 1920 from $5.50 M ft. No. 1 fir logs in 1896, to $30 M feet No. 1 fir in 1920.

Q. Are those actual market prices?

A. Those are actual market prices, yes, sir.

Q. Take the price of $5.50 in 1896. What was it in 1902?

A. The increase from 1896 to 1902 for instance was $3.50.

Q. You said the price was $5.50 in 1896. What was the price in 1902?

A. 1896, $5.50. 1902 ranged from $7.50 to $9.00.

Q. In 1905?

Ans. From $8.00 to $9.00.

Q. In 1908?

Ans. From $13.00 down to $11.00.

Q. In 1912?

Ans. Average price was $12.00.

Q. In 1915?

Ans. $11.00.

Q. In 1918?

Ans. $19.50.

Q. In 1919?

Ans. $20.00.

Q. In 1920?

Ans. $30.00.

Q. What about the—has there been the same relative increase in prices of the lower grades, 2 and 3?

Ans. Yes, sir.

Q. What about the cedar?

By Supervisor Spinning: All of these are No. 1 fir?

By Mr. Da Ponte: Yes, sir; all the prices that he has given are No. 1 fir.

A. On cedar, the statement shows the figures for cedar logs from 1910 to 1920.

Q. Was cedar sold—did cedar take the same prices that fir took prior to that time?

Ans. Yes, sir.

Q. What are the prices shown for cedar in 1910?

Ans. $11.56.

Q. 1912?

Ans. $13.25.

Q. 1917?

Ans. $15.21.

Q. 1919?

Ans. $23.00.

Q. 1920?

Ans. $35.00.

[fol. 651] Q. With regard to hemlock; did that have any market value prior to 1910?

A. No, sir; hemlock logs had no market value prior to 1910.

Q. In 1910 what was the value?

Ans. Six dollars.

Q. In 1918?

Ans. $11.60.

Q. In 1920?

Ans. $16.00.

Q. What is the spread between the first, second and third grades of fir—take on the 1920 basis?

A. For instance on 1920 they ran for No. 1 $30, No. 2, $23.00 and for No. 3, $17.00.

Q. 1919, $20, $16, and $12?

A. Yes, sir.

Q. The spread is down about $4 a thousand between the three grades, or approximately so?

Ans. Yes, sir.

Q. Prices on Grays Harbor are substantially the same as Puget Sound?

A. Yes, sir.

Q. Columbia River the same?

Ans. Very much the same.

By Mr. Da Ponte: I will offer that as N. P. Ex. 31, and if the Commission will let us mark that copy, we will supply others and mail them around, although I think that is sufficient explanation of it.

Admitted in evidence and marked N. P. Ex. No. 31.

Q. Are you familiar with the contract entered into on the 2nd day of May, 1888, between the Northern Pacific and Chauncy M. Griggs and others?

A. The St. Paul & Tacoma Lumber contract?
Q. Yes, sir.
Ans. Yes, sir.
Q. That is the contract which was afterwards assigned to the St. Paul & Tacoma?
Ans. Yes, sir.
Q. That is the contract that the Commission asked us to furnish information concerning. I will show you this contract and ask you to state what is the rate stipulated in that contract for transferring [fol. 652] logs, and what are the conditions, briefly. Just explain it.

By Mr. Henderson: Will you furnish copy of it?
By Mr. Da Ponte: I want him to make a few remarks concerning it. The Commission has a copy on file.

Q. Just state briefly the history of that contract and the operations under it down to date, what it contemplates.

By Mr. Henderson: We object to it as immaterial in the consideration of this case.
By Mr. Da Ponte: You asked concerning it.
By Mr. Carey: Let us have it introduced in evidence.
By the Director: You may offer a copy of it in evidence, either the one on file in the Department or this one.
By Mr. Henderson: We do not want a copy of it.
By Mr. Da Ponte: Let it be understood that this is in evidence marked N. P. Ex. No. 32.
(By witness, continuing:) At the time this contract was negotiated, in 1888, there was practically no movement of lumber by rail from the Pacific Coast to the East. The Northern Pacific had a large quantity of timber in Washington that was being sold in small lots; we were paying heavy taxes; we were anxious to get that timber cut into lumber and get some of the haul to Eastern points, and our company offered to the parties who afterwards formed the St. Paul and Tacoma Lumber Company, the opportunity to purchase a large block of timber lying tributary to Tacoma in Pierce County, provided they would construct a sawmill at Tacoma and manufacture the timber into lumber at that mill; this contract was the result of the negotiations, and it provided that the St. Paul and Tacoma Lumber Company must construct a mill at Tacoma within a certain time; and the contract provides that a portion of the cost, or a portion of the purchase price for the stumpage should go into the construction of a railroad.
[fol. 653] Q. Did that afterwards become what is known as the Orting branch of the railroad, up to the Puyallup river?
Ans. Yes, sir.
Q. And used by the St. Paul Mill for its logging?
Ans. Yes, sir.
The railroad was constructed and the lumber company complied with the requirements of the contract in the matter of constructing the plant, and has since been cutting up the timber.
Q. The money to build this railroad was the money which the

Northern Pacific received from the St. Paul for the purchase price of this timber, in part?

Ans. Yes, sir.

Q. A certain percentage of that money was diverted by the Northern Pacific under the contract for building this railroad for use by the St. Paul & Tacoma Lumber Company to haul out its logs?

Ans. Yes, sir.

Q. What was the rate per thousand, that stipulated?

A. The rate provided for under the contract is set forth in paragraph 6, which reads that the Company covenants and agrees to and with the purchasers that it shall and will thereafter transport the logs of the purchaser on said lands and upon adjacent lands of the purchasers, when delivered free on board cars of the company at any point or points on said railroad to be constructed as aforesaid or on the Cascade Division of the Northern Division Railroad South of the crossing of Green River to any road or branch that may be constructed——

By Mr. da Ponte: Give me the rate——

(Witness continuing:) that may be constructed, or through said lands, as provided by the company, to Tacoma, at the rate of one dollar ($1.00) per thousand feet board measure, the company furnishing all rolling stock, and the purchasers to load and unload all cars.

Q. That is the rate which is still in effect, and applies under advances which the Federal Government made under General Order 28 and ex parte 74?

Ans. Yes, sir.

[fol. 654] Q. The minimum feet is also fixed there, is it not, per car, at 5,500 feet per car.

A. I presume it is, but I cannot lay my fingers on it.

Q. What was the stumpage price fixed for the stumpage that was sold?

A. Fifty cents per thousand feet for all red, and yellow fir, cedar and spruce.

Q. All the other grades were thrown in free?

A. Yes, sir. The other classes of timber were thrown in without charge.

Q. Were those lands cruised to fix the price the company was to pay?

A. Yes, sir.

Q. Please state, if you know, at what rate per thousand feet of board measure the St. Paul company got that timber, according to the actual cut that came off of the land?

By Mr. Henderson: Does Mr. Plummer presume to know the actual price they got it for—does he know the amount they cut?

A. I cannot say that because I have no information here as to the exact amount of timber cut.

Q. Do you know approximately, Mr. Plummer? I do not care for the exact figure.

A. Judging from the cruisings that we have made during the last

four or five years with which we could compare the cruisings made about the time we cruised timber on the St. Paul lands, I should judge that the cut would run about two and a half to three times that cruise made in 1885 or 1888.

Q. So the St. Paul company actually got this cruise at something like fifteen cents a thousand?

Ans. Approximately, yes, sir.

Q. And the land was thrown in without any price under that contract, was it not?

[fol. 655] A. No, there was a charge made for the lands in this case, $1.25 an acre.

Q. Do you know whether the St. Paul company has been selling that cut-over land of late years?

A. They have been selling some cut over lands, yes, sir.

Q. That was conveyed under that contract?

A. I am not sure about that. They are advertising cut-over lands in this same district, and I presume they are part of the lands that our company sold to them.

Q. What is the price they are advertising it for?

A. From ten to twenty dollars an acre.

Q. Are those the lands from which the logs came, the value of which you have testified to awhile ago?

A. This market price of logs?

Q. Yes, sir.

A. Well, yes, presumably the logs from this land would carry the same value.

Q. The lands (logs) which they secured at about fifteen cents a thousand, have been selling, or did sell in 1920 as high as thirty dollars a thousand, and cedar thirty-five dollars?

Ans. Yes, sir.

Q. The company has no other similar contract as that with the St. Paul?

A. It has a contract with the Northwest Lumber Company.

By Mr. Clifford: Did I understand witness to say that the selling rate of $1.00 per thousand feet board measure, 5,500 feet minimum, plus the increase granted by General Order 28 and ex parte 74 was the selling rate?

By Mr. da Ponte: Yes, sir.

By Mr. Clifford: Mr. Calderhead informs me that rate was increased after a subsequent hearing.

By Mr. da Ponte: No, sir, the minimum was changed.

By Mr. Calderhead: The minimum was increased; the rate was not.

[fol. 656] By Mr. da Ponte: The cars had, I take it, to come larger and carried more, but the rate was not touched by this Commission.

By the Director: What was the date of that contract?

By Mr. da Ponte: 1888.

By Mr. Henderson: It was modified in 1897.

By Mr. da Ponte: Only in minor particulars; they were relieved of some onerous terms, but the rate, as I understand it, the actual

rate, is now $1.65, produced by the two 25% advances. The minimum has been increased; it was found they could transport a greater amount on account of greater size of cars since this contract was made, and the Commission increased the minimum.

Q. Is this the contract which initiated the lumber business of the State of Washington?

Ans. Yes, sir.

Q. That was the beginning of our lumbering industry?

A. Yes, sir, particularly the rail business.

Q. It has been growing from nothing at that time to its present proportions?

Ans. Yes, sir.

Q. What other contracts has the Northern Pacific?

A. The Northern Pacific Railway and the Northwest Improvement Co.

Q. The Northwestern is a subsidiary of the Northern Pacific?

A. Yes, sir.

A. They made an agreement with the Carey Mill Company dated November 1, 1900 for the sale of timber in Township 22 N. 7 E. 23 N. 7 E. and 23 N. 8 E. comprising the timber on a number of sections, seven sections in all, the price to be paid under the contract being seventy cents per thousand feet on a cruise that had been made prior to the date of the contract; the seventy cents per thousand feet was to be paid without interest when the lumber company in its operations should reach a section; that is, when they extended their track to reach a section of Northern Pacific timber they were then to pay 70¢ [fol. 657] per M feet without interest. This contract has been running for twenty years and they have only reached about half of the timber; they have reached and paid for about half of the timber.

Q. As they reach that in the course of their operations at the present time they take it there without interest at seventy cents per thousand feet?

A. Yes, sir, on their old cruise made prior to the date of the contract.

Q. How does the cut compare with that cruise?

A. We have figures on one section that they have cut over and the actual cut is just twice what the cruise was.

Q. That also throws in the hemlock and other timber, does it?

A. They paid seventy cents, on credit, and pay seventy cents per thousand for fir, cedar and spruce only, and all other cleasses of timber were thrown in without charge.

Q. The actual price which they paid according to the contract was about thirty-five cents per thousand, with the hemlock and other logs thrown in?

A. Yes, sir, it would be about thirty-five cents per thousand.

Q. They pay that today without interest?

Ans. Yes, sir.

Q. Who has been paying the taxes all these years?

A. They pay only part of the taxes. They pay a little more than half of the taxes; we have to pay the balance.

Q. Is it not a fact the Northern Pacific has had to carry that contract with these people for as much money as they got for the timber?

A. So far we paid out one half of the amount we got for the timber in taxes alone.

Q. They are holding that as their reserve and cutting all the other timber they can get?

A. The way the matter is working out, is, having so little investment in our timber, they cut that last; they cut all the other [fol. 658] timber they have in the State that they have a larger investment in; they cut that first, and when they come to ours they start cutting it.

By Supervisor Spinning: Don't you think you are stalling along and allowing the timber to grow?

A. It may be.

By Mr. da Ponte: The suspicion has arisen that the fellow that represented the railroad in that contract represents the purchasers.

Q. What was the rate fixed there in that contract?

A. The rate was fixed at $1.50 per thousand feet from any point on Green River branch which runs up through the property to either Seattle or Tacoma.

By Mr. Henderson: Whereabouts in Seattle or Tacoma?

A. At the dumping track to be provided by the mill company in either Seattle or Tacoma.

By Mr. Dudley: What mileage would that be?

A. I don't know.

By Mr. Henderson: Are there not some conditions with reference to carloads and trainloads in that contract?

A. Yes, sir.

By Mr. da Ponte: What is it?

A. The minimum is 6,000.

By Mr. Henderson: Does it provide for train loads?

A. The contract provides that the railway will not be required except at its own option to transport logs in lots of less than twenty car-loads.

By Mr. da Ponte: That is the origin of these so called train-load rates so far as you know?

A. I suppose so; I do not know.

Q. Is the St. Paul mill still cutting lumber they bought under the contract of 1888?

A. Yes, sir.

Q How much operation ahead have they there?

A. I do not know. With our timber, and the timber of others, I suppose they have about fifty years or more operation up there.

[fol. 659] Q. Those are all the contracts which we have which affect the rate?

A. They are all which affect any fixed freight rate.

By Mr. da Ponte: We offer that Carey contract as N. P. Ed. 33.

Contract admitted in evidence as Ex. N. P. 33.

Cross-examinaion.

By Mr. Henderson:

Q. Is not there a minimum number of feet which which must be shipped per year?

A. Yes, sir.

Q. Twenty million feet which they must ship?

A. Yes, sir.

Q. And they must be in train loads of not less than twenty car loads in order to get that rate?

A. Yes, sir.

Q. In reference to that last contract with the Northern Pacific and the Northwestern Lumber Company, I will ask you if it is not a fact that the mill company has been paying considerable money annually because it has failed to ship the minimum of twenty million feet?

A. Yes, sir.

Q. As high as $17,000 they have paid by reason of failure to ship that, they have paid in?

A. I have not the figures here. I do not know, but they have paid some.

Q. That is your signature on that, is it not (showing witness a paper)?

A. Yes, sir.

Q. So that they have paid at least seventeen thousand dollars to you as additional freight rate by reason of their failure to ship annually twenty million feet?

A. Yes, sir.

Q. The rate in that contract is conditioned on their shipping twenty million feet per year?

A. Yes, sir.

Q. Referring to your Ex. No. 31, which is the price of logs, I think you testified that the St. Paul and Tacoma Lumber Co. in 1888 by contract which was revised in 1897, purchased their timber at something like fifteen cents per thousand, and got the land thrown in.

A. I did not say that.

Q. I mean that was the effect of it.

[fol. 660] A. I said they purchased it at fifty cents a thousand and if the increase in the amount of timber cut over cruisings that were made prior to the date of the contract was about the same as some increases that we had found in like cruisings made at that time, that there would be about two and a half or three times as much timber there at this time as there was at the time the cruise was made prior to 1888.

Q. When they were buying the timber for that price was when timber was worth $5.50 to $7.50 per thousand feet No. 1 fir?

A. Yes, sir, as logs.

Q. What is that stumpage worth today per thousand?

A. That stumpage would be worth from $2.50 to $4 per thousand.

Q. What is the price of logs today, No. 1 fir?

A. I haven't heard since last Saturday.

Q. $20.00 then was it not?

A. Possibly it is about $20 for Number One.

Q. So the ratio of the stum-age to the selling price has not materially changed except that the stumpage is greater ratio of the selling price today than it was in those days, is not that true?

A. Well, I have not figured that out, but you can figure it very easily from your ratio there and the figures you have.

Q. If they purchased this stumpage on the basis of fifty cents but they actually got enough timber so it made fifteen cents, and the logs are worth from $5.50 to $7.50, the ratio of the purchase price to selling -rice would be greater than it would be today at from $2.50 to $4.00 a thousand, and logs selling at $20.00 would it not?

By Mr. da Ponte: You can figure that out.

A. From fifteen to—yes, sir, I guess it would

Q. At the time you sold this timber under either of these contracts there was no value to cedar or hemlock, was there?

[fol. 661] A. Yes, there was a value to cedar.

Q. You have not shown it in your market value list, Mr. Plumner, if there was.

A. Cedar was carried at the same value that No. 1 Fir had.

Q. Was that true of hemlock also?

A. No. Hemlock did not have any market value as logs or stumpage prior to 1900.

Cross-examination by Mr. Clifford:

Q. The timber that you have been discussing and which was included in the St. Paul & Tacoma Lumber Company contract, and the Carey contract, was that all timber in the land grant made to the Northern Pacific Railway Company?

A. Yes, sir.

Q. And that land grant was the one made at the time of the building of the line?

A. Yes, sir, under the Act of July 2, 1864.

Q. That was the only consideration of the grant was it, the building of the railway?

A. The grant was made to the Northern Pacific for the purpose of aiding in the construction of the railroad.

Q. In other words, no money was passed for this timber?

By Mr. da Ponte: That is admitted, but it has no relevancy to the case.

A. We did not pay anything for the timber.

By Mr. Balmer: There was some money lost in two receiverships.

By Mr. da Ponte: The Government did not lose anything. They doubled the price on the reservations.

[fol. 662] P. L. ALLEN, being first duly sworn, testified as follows:

Examined by Mr. da Ponte:

Q. What is your name?
A. P. L. Allen.
Q. What is your occupation?
A. Chief clerk, Appraisal, Northern Pacific Railway.
Q. Are you engaged in physical valuation of the lands in the right of way and terminals of the Northern Pacific?
A. Yes, sir.
Q. In connection with the valuation being made by the Interstate Commerce Commission pursuant to the Act of Congress?
A. Yes, sir.
Q. Have you been co-operating with the Division of Valuation of the Commission in that work?
A. Yes, sir, we followed their methods.
Q. To what extent have you agreed with the Interstate Commerce Commission represenatives on this land valuation in this State?
A. On sheet 3 of this statement we have agreed in the items on Seattle terminals; we have agreed on a total out of $12,952,458, of $12,056,458, at Seattle, and of the Tacoma items, shown as Tacoma terminals, we have agreed, according to these figures, on $8,020,896. An adjusted figure was arrived at on which this figure was based.
Q. So that the valuation of the terminals at Tacoma and Seattle has practically been agreed upon?
A. Yes, sir, substantially.
Q. How did that compare with the valuation of the Railroad Commission of this State in 1908 for those terminals, including the property the State Commission classified as non-operating, and which the Inter-State Commission classified as operating?
[fol. 663] A. My information is that on the Tacoma terminals, the State Railway Commission classified $7,638,000 on the carrier lands.
Q. Operating property? A. Yes, sir.
Q. How much on the non-operating?
A. On the non-operating they set a value of $4,980,417.
Q. What is the total?
A. $12,618,423.
Q. And that is the figure that represents the property which you have agreed on with the valuation division of the Interstate Commerce Commission, at $8,020,896?
A. No, sir; that $8,020,896 represents our claim of the carrier lands. We do not agree with the Commission's classification on the carrier lands as we have determined them. It is not the classification as made by the Interstate Railway commission.
Q. Have the Interstate Railway Commission classified all of these lands mentioned by the Railroad Commission of Washington figures as operating?
A. Substantially, yes, sir.
Q. The Railroad Commission of Washington put a value on the operating and non-operating terminal property of the Northern Pacific which you have given as $12,000,000?

A. Yes, sir.

Q. What part of the property does this figure you have agreed on of eight million, with the I. C. C. represent?

A. That figure of eight million covers substantially the same lands as the lands which were classified as carrier by the State Commission; there were a few changes.

Q. So that the Interstate Commission has practically accepted the State Commission's valuations on that property?

A. I would not say exactly; I would say that they valued it as near as I could find out—I did not have the details as to just what [fol. 664] the State had classified as carrier, but there is no real substantial difference between these classifications.

Q. Going to Seattle. How does the valuation agreed on with the I. C. C. compare with the valuation found by the State Commission in 1908 in the Seattle terminals?

A. On the Seattle terminals they placed a value of $12,952,458 as value of the carrier lands. Now that was a railroad value, and I would like to change this.

Q. It appears that the finding 39 of the Railroad Commission—that they valued the terminals in Seattle at $11,042,659?

A. No, at $13,038,176.

Q. That is correct.

A. That compares with the value we have shown on that sheet as being the railroad value, $17,638,538.

Q. You mean the railroad value is higher, over the market value, representing what the company has to pay to acquire it?

A. So-called excess cost.

Q. The figures used here represent the naked land value?

A. Yes, sir.

Q. Our figures, in fixing our return, we have used the naked land value—so that is practically identical?

A. Yes, sir.

Q. Have you agreed with them on right of way?

A. No, sir.

Q. What is the total amount of right of way value outside of terminals on the Seattle and Tacoma Divisions?

A. Tacoma Division, our claim for naked land value is $3,462,-123.

On sheet 2, Seattle Division, our claim is $2,183,288.

Q. You have not agreed with them on that?

A. No, sir.

Q. Do you know how near you are together?

[fol. 665] A. On the comparisons that we made at Seattle we found there was 20% difference between our claim and the finally adjusted value; in Tacoma it ran 74%. That difference would not be so much in the company right-of-way.

Q. You had to adjust these on terminals. On right-of-way, outside of cities, do not know what your percentage is with them?

A. No, sir.

Q. At any rates it cannot be as much? It is a comparatively small item?

A. It would be much less than in the cities.

Q. Who places these values on the right of way as shown on these sheets?

A. They were placed there by appraisers under my charge.

Q. Did you follow the method prescribed by the valuation department of the I. C. C. in making your appraisals, and you represent this as naked land value, marked value of the property?

A. Yes, sir.

Q. As of what date?

A. June 30, 1917.

Q. That is the date which the Commission is using to determine the valuation of the railroads?

A. Yes, sir.

By Mr. da Ponte: I will offer this exhibit, showing these values in detail.

Admitted in evidence, marked N. P. Exhibit 34.

Examination by Mr. Clifford:

Q. Calling your attention to Exhibit 34, is the claim naked land value the value placed by the I. C. C.?

A. No.

Q. Do you show anywhere on 34 the I. C. C. value?

A. No, sir.

[fol. 666] Q. You have not agreed on right of way yet?

A. No. Sheet 1 represents our claim for naked land value; Sheet 2 represents our claim. In Sheet 3 $12,056,458 of the item Seattle Terminal has been agreed to by the Commission and that item of $8,020,896 has also been agreed to.

Q. Have you there any tabulation showing the comparable figures arrived at by the I. C. C. upon which you have not yet agreed?

A. No sir, we have not. You mean have I the comparable figures covering the items we have agreed on and have not agreed?

Q. You show several items other than this twelve million dollars, and the eight million dollars upon which you have practically agreed?

A. Yes, sir.

Q. Have you the figures which the I. C. C. is contending for, for the others?

A. No, sir, we do not know what their values are.

Q. Do you know whether they have arrived at values?

A. Yes, sir, they have.

By Mr. da Ponte: They have not been published yet?

A. They have not been published yet; have not been adjusted.

By Supervisor Cleland: What is the difference between naked land value and railroad value?

A. Naked land value represents the value for general purposes, that is, for farm land or anything for which it is used for general

purposes. The term 'railroad value' is based on the experience of the carrier and a number of cases where they have had to pay a great deal more for right of way than the naked land value was; in all cases, or nearly all cases, the right of way costs more than naked land value; that has nothing to do with tracks and terminals.

By Mr. da Ponte: The Commission found in 1908 it does cost a railroad company, when it goes to condemn property, something in [fol. 667] excess of the real true value of it. The Act of Congress directed the Commission to find that value, and you will remember that decision in the K. K. & T. case, where they took that case to court, where the Commission refused to find this extra cost above the intrinsic value, and the Supreme Court of the United States held that the Commission must find that, and directed them to find it. To avoid any controversy in making up our figures as to value of this property upon which we claim right to earn eight per cent, we have used naked land value, so that is one controversial point which is eliminated, because we do not claim it at this time.

By the Director: What is the purpose of this testimony?

By Mr. da Ponte: To show the value of property of the Seattle and Tacoma Divisions, the proper percentage of which we are going to apportion to log traffic, and upon which we claim a right to earn a return, the figure which the accountants used in making their compensatory figures. I will follow this witness by an engineer who has compiled construction costs.

HARRY BRYAN, being first duly sworn, testified as follows:

Examined by Mr. da Ponte:

Q. What is your occupation?

A. Division engineer, valuation, Northern Pacific Railway, St. Paul, Minnesota.

Q. Are you engaged in valuing the railroad and structures, with the Interstate Commerce Commission, Bureau of Valuation?

A. I am, yes, sir.

Q. Have you compiled a statement showing reproduction cost of the Northern Pacific, Tacoma and Seattle Divisions, in this State?

A. I have.

Q. Was that valuation made in accordance with the rules and [fol. 668] regulations prescribed by the Interstate Commerce Comsion, Bureau of Valuation?

A. Yes, sir.

Q. I show you this exhibit. I have only three copies of this with me and copies will not be needed, I think, but if one is needed for the files, I will leave one of these for the Department to refer to. There is a lot of stuff, maps, &c. with it, which it is nearly impossible to reproduce in a short time. I will offer this statement in evidence as N. P. Ex. 35. Turn to sheet 1, lines west of Ellensburg, $95,381,319.00. What does that comprise?

A. That represents the valuation of forty-two sections, of all lines West of Ellensburg comprised within the three divisions, Seattle, Puget Sound and Tacoma, and it comprises all railway accounts.

Q. What do you mean by that?

A. It comprises all the accounts from three through to 46.

Q. Were those the accounts which the Interstate Commerce Commission prescribed?

A. Under classification of accounts, yes, sir.

Q. Those accounts include all of the items of expense going into the making up of the complete cost of the operative property?

A. Of the constructed property.

Q. Without the equipment?

A. Without equipment.

Q. You show particularly here the Auburn terminals, Tacoma terminals and Seattle Terminals?

A. Yes, sir.

Q. What does that represent?

A. That represents terminal property within the terminals, classified as terminal property.

Q. $20,949,284.00?

A. Yes, sir.

[fol. 669] Q. Total, exclusive of land, $116,330,603?

A. That item includes equipment; with $95,381,319 includes equipment.

Q. So the total cost is $116,330,603, as cost of our property including equipment?

A. Yes, sir.

Q. What does the second sheet represent?

A. That is the summary by valuation sections; that is, each valuation section is described; for instance, Ellensburg to Palmer Junction, $13,551,616.00; that is the valuation as found of that portion of the valuation section structure.

Q. That means cost of production?

A. Cost of reproducing new; that compares the valuation section lying between Ellensburg and Palmer Junction as of December 31, 1920.

Q. What date did you use in making up this?

A. June 30, 1917, and added thereto all improvements and deducted therefrom all retirements, bringing it up to December 31, 1920.

Q. This represents the present value, as brought up to date?

A. Yes, sir.

Q. Less depreciation?

A. No depreciation. We did not estimate depreciation.

Q. What about retirements?

A. For instance, sidetracks.

Q. Abandoned property?

A. Yes, sir.

Q. That is in general accordance with the rules and regulations prescribed by the Interstate Commerce Commission?

A. It is.

[fol. 670] Q. Sheet two goes on and shows?

A. Each valuation section.

Q. By valuation section you mean the section of the railroad into which the railroad was divided in making up the figures?

A. Yes, sir.

Q. What is sheet three?

A. It is a continuance of the summary, to which is added the equipment to the West of Ellensburg which cannot be allocated to a particular valuation section.

Q. You mean you have allocated equipment on a mileage basis?

A. Yes, sir.

Q. And assigned directly all that part of the equipment which is local to the road for that particular section?

A. Yes, sir.

Q. What is that beginning on page 5?

A. Summary by classified accounts; that is, the classification of the I. C. C. classification, effective July 14, 1914; classification of investment in roads, investment in steam roads.

Q. Section 3 shows cost of grading?

A. Within those sections.

Q. Have you agreed to any extent with the Commission on those figures?

A. Quantities included in grading, without doubt; the quantities used were those filed by the Interstate Commerce Bureau of Valuation; since that time I have been talking with a Bureau valuation engineer, last night, and he said some minor changes have been made, but they are so slight that they will not change these.

Q. That is the largest item?

A. Yes, sir.

Q. Out of a total of 95 million?

A. Out of a total of 84 million, the total is 38 odd million.

Q. Have you agreed on any others?

[fol. 671] A. On no other items.

Q. Have you gone far enough to know what would be the possible extent of the dispute which might be expected to develop on the other items?

A. From all accounts that I have had under discussion at all, I understand these will check approximately within ten per cent at the present time.

Q. The dispute will be, if and, within ten per cent of the total?

A. Yes, sir.

Q. What is sheet 6?

A. It is the taking up of each valuation section; taking up first the section Ellensburg to Palmer Junction; there is a detail as shown on page 2, detail of the summary.

Q. The second item, tunnels and subways gives details of values of each section?

A. Yes, sir.

Q. So the exhibit goes on through, all the balance of it is mere details?

A. Details of the two summaries.

Q. So any one can look at this and tell exactly what is being carried in this total for any particular account or any particular valuation section?

A. Yes, sir.

Q. And all this, you say, was done and filed in strict accordance with the rules and regulations promulgated by rules and regulations of the Interstate Commerce Commission pursuant to Act of Congress?

A. Yes, sir.

Q. You have attached to it some blue prints and maps, what are they?

A. First, blue print attached shows part of the index map attached to our valuation map; there are shown in red the lines West of Ellensburg included in the valuation. The index sheets are on a larger scale; the maps are not drawn to scale, the valuation sections, with the exception of Valuation Section Two, which extends from Pasco to Palmer Junction, which shows an entire section, whereas [fol. 672] the portion included in this item is that between Ellensburg and Palmer Junction, Seattle Division. Sheet 3 shows inclusion of Tacoma Terminals, all of valuation in Section 4. Or rather all of Tacoma Terminals covers valuation section 4; in other words there is no segregation there.

Q. It shows in red there the Tacoma and Auburn terminals?

A. Yes, sir, while all section 3 is in Auburn terminal.

Q. The next map is——

A. Sheet 14 shows Seattle terminals in red. The following sheets show merely valuation sections by numbers.

Q. Does anything else occur to you in explanation of this?

A. No, I think that covers the ground for any one who goes through it. They can see at a glance what it is.

By the Director: What is the total valuation?

A. That is on sheet 1; $116,330,603.00.

Q. That includes equipment?

A. Yes, sir, and exclusive of land.

By Supervisor Cleland: You say that is the cost of reproduction?

A. Yes, sir.

By Supervisor Cleland: Based upon what price?

A. Prices of 1914. The Interstate Commerce Commission assigned a date of valuation to each carrier; for instance, the Great Northern was of June 30, 1915; the Northern Pacific June 30, 1917, and the Milwaukee June 30, 1918, and I believe, though I am not *not* sure, it was the original intention to make the valuation as of prices of that particular valuation date, but the war disturbing prices, it was adopted or arranged that prices as of 1914 should obtain. Therefore all carriers' valuations are based on values as of 1914; these prices represent the average prices between 1910 and 1914.

Q. You take the actual condition of the property as of 1917, June 30?

[fol. 673] A. Yes, sir, before inventory was made.

Q. Of the condition of the property?

A. Yes, sir.

Q. Then to determine the value you took prices as of June 30, 1914?

A. Yes, sir.

Q. To reproduce the property in the condition it was in 1917?

A. Yes, sir.

Q. I notice in your details of these accounts, for instance power transmission system, Item 31, on page 75, what is that?

A. The Interstate Commerce Commission prescribes that these accounts shall include cost of high tension transmission systems, whether overhead, underground, &c., for producing power for propelling trains of cars, or for power, heat, light and general purposes.

Q. That is power, for instance, used in the shops and to repair cars and such things?

A. Shops, and transmitting heat.

Q. This item 30, Paving; what is that?

A. Paving between tracks in cities, and where it does not occur in crossings, in between tracks.

Q. That is——

A. Tracks in public highways.

Q. That is one of the Commission's Divisions of the accounts?

A. Yes, sir, that is the I. C. C. classification.

Q. Roaway machines.

A. Boilers, cars and motor inspection, push hand cars, concrete mixers, dredging machines, portable engines, grading outfits, and rock crushers, etc.

Q. I think the other items on page 5 all explain themselves. I believe that is all unless something else occurs to you?

[fol. 674] Cross-examination by Mr. Clifford:

Q. As to the inventory and listing of that property, who did that?

A. The carrier did that, based on preinventory covering two years, beginning 1914 or 1915, and later the Interstate Commerce Bureau of Valuations sent into the field certain parties who went over with the carriers parties, and checked over as far as could be checked, and reconcioed in the field all differences that were result of preinventory, developed; in other words all the differences that could be reconciled in the field were done at the time so as to obviate the necessity of wrangling when — should meet in final adjustment conference.

Q. Has there been a final adjustment upon the inventory?

A. Upon practically everything, but there are some items that have been never adjusted, such as for instance, per ton for grading when it was done in tide flats and around dykes; the Interstate Commerce Commission holds that a certain portion of that grading should be eliminated as such and included in lands, for the reason the land has been enhanced, and it would be duplication to include that in Account 3.

Q. Can you tell us in figures, and dollars, to what extent those inventories are at variance?

A. No, because we have never received duplicate engineers reports. These are now in Washington and we will not get them for sixty days perhaps, and then our protest will be filed against the larger differences in that report, and then their adjuster will come out and after that we will get together.

Q. You do not know the extent of the differences?

A. I assume it will not be more than ten per cent.

Q. What leads you to assume that?

A. Adjustments heretofore made.

[fol. 675] Re-examination by Mr. Da Ponte:

Q. These adjustments in other instances result in compromise, splitting of differences?

A. Yes, sir, give and take, and resulting adjustments.

Q. We have got to a point where we are practically within 10%?

A. Yes, sir.

Q. The practica has been to compromise that by splitting the difference?

A. In dealing with the Bureau of Valuation it has been the custom to give a little here and gain here, and vice versa, resulting in adjustments.

Q. There are some items. Take your item general expenses, 4%, and things of that kind; those are certain percentages of certain items that are added for overhead?

A. Yes, sir; engineering, for instance is figured at 5% of the accounts 3 to 47 inclusive, and that 5% is an average of the percentage which I believe has been admitted by the Interstate Commerce Bureau of Valuation; it was found through valuation, their own valuation of the Northern Pacific figures, quite a number of lines were constructed between 1900 and 1914, with our engineering expense running about 5.26 per cent, and 5% was adopted as a fair overhead of cost of engineering.

Q. I believe you have explained these accounts where they represent various classifications in which the I. C. C. divided all of the various expenses going to make up a constructed railroad, and those are the figures and methods upon which the Commission arrives generally at its complete valuation?

A. That is true.

Recess until 9:30 a. m. tomorrow, October 25, 1921.

[fol. 676] Tuesday, October 25, 1921—9.30 a. m.

Hearing continued, all parties present as before.

E. V. PETERSON (recalled).

Direct examination.

Mr. Da Ponte:

Q. You have been sworn already?

A. Yes sir.

Q. I call your attention Mr. Peterson to special Northern Pacific exhibit #190 showing the Washington intrastate traffic on logs, etc. which was referred to in the last hearing but was not offered in evidence, please tell what that exhibit is.

A. This statement was made at the request of the Department of Public Works to show the revenue on the intrastate traffic on logs for the year of 1919 and December 1920, and also a division of the intra-state and interstate ton miles for the years 1919 and 1920.

Q. Now that is the intra-state traffic as compared with the interstate traffic?

A. Yes sir.

Q. The intra-state traffic for the year 1920 was 452,784,759 revenue ton miles as compared with 1,186,576,969 interstate revenue ton miles?

A. Yes, that is correct.

Q. Did you figure what percentage the state is of the interstate?

A. The percentage as shown here gives the intrastate 27.62 per cent.

[fol. 677] Q. That has reference to Mr. Gray's exhibit in which he figured 4260?

A. Mr. Gray's is an estimated figures, yes.

Q. That was the figure he took from the finding of the 1908 Railway Commission of this State?

A. Yes sir.

Q. And this shows the present condition?

A. This is the actual figure, yes.

Sup. Spinning: 27.62?

A. That would be 72.38 on the interstate.

Mr. Da Ponte: It is 27.62?

A. Yes, 27.62 and 72.38 per cent on the interstate, making 100 per cent.

Q. At the last hearing we offered an exhibit #22, was it?

A. That was number 20, that special statement there, copies to be filed later on.

Q. Of which we didn't have copies. That exhibit shows the movement of logs on Seattle and Tacoma division, cars handled in exclusive log trains, and logs handled with other commodities; and the same information on the Tacoma division for the months of September, October and November, did you figure that percentage of logs in exclusive log trains?

A. I have not figured that up, but the figures can be obtained from the statement.

Q. Can you give that for the record conveniently, it will save a lot of time hereafter, probably?

A. I can figure it out.

[fol. 678] Q. Never mind, we will do that later. This is exhibit #20.

A. In submitting that statement I call attention to #20, I want to make some remarks as to the method of preparation of that statement. It reads on the top "Movement of cars of logs—Seattle and Tacoma divisions, Seattle division" cars handled in exclusive log trains, and "log cars handled with other commodities", which is of course correct, but in some cases cars have been counted twice, due to the fact that they were handled twice, once on the branch and also on the main line.

Mr. Da Ponte: You made that explanation before.

A. Yes, I made the explanation in a previous hearing but I wanted to refer to it now.

Mr. Da Ponte: Now heretofore Mr. Gray made some criticism because of the higher operating per cent shown in the State of Washington than on the system generally, and I think it appeared that the expense in Washington intrastate was 130 per cent of the average system cost of operation per 1,000 gross ton miles.

Mr. Henderson: More than that.

Mr. Da Ponte: I am sure that was the figure, 130%. We figured it at the time and I am sure that is correct. Now then, have you prepared any exhibit to show why the State of Washington is probably necessarily chargeable with a higher ratio of operating expense per 1,000 gross ton miles than on the system as a whole?

A. Yes sir.

[fol. 679] Q. Please make your explanation and refer to your exhibit and we will offer it in evidence. Have you prepared an exhibit number special 240?

A. Yes sir.

Q. State what that is.

A. At the last hearing Mr. Calderhead expressed a request that he would like to get a statement showing the relative branch line mileage in the State of Washington compared with other states, and we have therefore prepared this statement; and it is very significant that the proportion of branch line mileage in the State of Washington as shown is 31.09 per cent of the entire line, the highest percentage of any state we traverse.

Q. What is the next highest?

A. The next highest is the state of North Dakota, and the matter of the branch line mileage there shows 28.32 per cent. Now comparing the State of Minnesota and the State of Washington, we have slightly less than 200 per cent of total road mileage operated but we have more than 300 per cent of the branch line mileage in the state of Wash. as compared with the state of Minnesota.

Q. Minnesota is a terminal state, the same as Washington?

A. Yes, but for my comparison we will take the state of Montana;

they show there an increase of approximately about 20 per cent in the matter of total mileage, but you will notice that the branch line increased somewhere around 65 per cent. The figures shown are the ones taken from the annual report of the I. C. C. and the figures at [fol. 680] the bottom of the statement indicate the total miles operated as distinguished from the road miles operated.

Mr. Da Ponte: I will offer that in evidence as Northern Pacific's exhibit #37.

(Admitted and marked "Northern Pacific exhibit #37.)

Q. Now the significance of that is to show that inasmuch as the cost of operation on branch lines is much in excess of the cost of operation on main lines, that the preponderance of branch lines in Washington naturally increases the relative expense as compared with the system as a whole?

A. That is correct.

Q. I believe your other exhibit shows that in the State of Washington the cost of operation of branch lines was about twice what it is on main, does it not per estimated loaded car mile, your exhibit 18?

A. Are you referring to the year ending December 31st, 1920?

Q. Yes, that exhibit No. 18.

A. It is about that, I would not say exactly, but I know it is 18 cents on the main line and 38 on the branch line, that is leaving out the terminal figures.

Q. That is because of the lighter traffic density on the branch lines?

A. Certainly.

Mr. Henderson: I would like to have the witness testify instead of having counsel putting in the testimony and asking witness if it is true, I would rather hear from the witness because I cannot [fol. 681] cross-examine Mr. Da Ponte.

Mr. Clifford: Directing your attention again to 37, you stated that your memory was that the showing previously made was that the cost of main line and cost of branch line operation in the State of Washington were 18 and 38, was it?

A. Yes sir.

Q. That is 18 cents and 38 cents?

A. Yes sir. That is the figure I have in mind. I can get the exact figure.

Q. Along the line of #37 to which you have just referred, do you know what the cost is, comparatively speacking, of main line with branch line in these other states?

A. We are getting to that now, I have special statement.

Q. Is that the number you are now referring to?

A. I am, special #38 coming along.

Mr. Clifford: All right.

Mr. Da Ponte: Now have you prepared a statement number special #241?

A. Yes sir.

Mr. Da Ponte: I will offer that in evidence as Northern Pacific's exhibit #38.

(Marked #38.)

Q. What is that exhibit?

A. The idea of this exhibit was to show that the main line cost is of course less than the branch line cost, we have taken the three months that were covered by the previous exhibit in this hearing [fol. 682] instead of confining ourselves to the divisions in question, we have taken the entire line; taking the main line and the branch line separately and you will notice the cost per estimated loaded car mile is 16 cents, approximately, on the main line, and 34 cents on the branch line, or .1585 on the main line to be exact.

Q. That is estimated loaded car mile?

A. Yes, as compared with 36.89 cents on the branch line; and similarly on the net ton mile basis the main line show 71.68 cents and the branch line 182.01 cents.

Q. Is that the entire system?

A. Yes, that is the entire line, divided between main line and branch line, including the lines in the State of Washington.

Q. The entire system?

A. The gross ton mile cost is 34.04 cents for the main line and 32.08 for the branch line. And in every instance you will notice that the cost is practically doubled. I have shown the relationship of the branch line operating cost to main line, which is 24 per cent, and also the proportion of the loaded car miles and the net and the gross ton miles of the branch and mail line, which is ten per cent. Now that indicated directly the preponderance of the operating expenses of the branch line. In other words, while the business handled on the branch line is 10 per cent of the main line, the cost of doing such business is 24 per cent.

[fol. 683] Q. Now the reason for that has heretofore been explained, that that is because of the necessity of giving service on branch lines and the lightness of the trains as compared with the main line?

A. That is the answer yes. In regard to this statement another question was raised by Mr. Calderhead as to the charge of the terminal expense to the Puget Sound division shown here for reference in the last columns, the terminals at the head of the lake; and the twin cities, and the Puget Sound division. It shows that the expense of the terminals has practically doubled on the different terminals and is 70 per cent higher on the total operating expenses. We don't of course charge in any of this twin cities terminals and head of the lake terminals against the state of Washington traffic.

Q. That was with this idea—that if the traffic originating in Washington going through participates in the use of the twin city terminals?

A. To a certain extent, but is not charged for that service.

Q. So if you are going to charge Washington with the entire expense and credit if anything in excess of the mileage proportion of the revenue you would have to consider charging the state of Washington traffic with the terminal expenses at the other end?

A. That is correct.

Q. Is that all on that exhibit?

A. Yes sir.

Mr. Clifford: Was that submitted Mr. Peterson?

[fol. 684] A. Yes, sir.

Mr Clifford: Did I get the impression from your remarks on No. 37 that the proportion as between the cost of operation on main line and branch line within the State of Washington was an unusual proportion, one unfavorable—an unfavorable showing to branch line traffic?

A. No, I wouldn't say that.

Q. In fact, comparing it now with #38, are the percentage figures 15.85 under cost per estimated loaded car mile, total operating expenses for main line and 36.89 cents cost per loaded car mile branch line, comparable with the 18 and 13 percentages that you gave for the state-wide——

A. I would say so, yes.

Q. So far as branch line operation is concerned in the state of Washington it is not substantially more expensive than it is throughout your system?

A. The statement I give you shows a cost of 38.82 per estimated loaded car mile, that is not correct according to the record——

Mr. Clifford: I am taking your statement for it.

Mr. Da Ponte: We are not making any claims Mr. Clifford that the Washington branch line costs are out of proportion to other branch line costs.

Mr. Clifford: I got that from your statement, not from the witness, and he gave assent to it.

A. We show a cost there of 38.82 compared with the total showing on the present statement of 36.89 for branch line, which shows that [fol. 685] the cost of the Tacoma branch line is perhaps a little higher than the average branch cost.

Mr. Clifford: Have you a comparable figure for main line there?

A. We show on exhibit 38 15.85 cents as the cost per estimated loaded car mile of main line, and that of course includes, as the foot note shows, the terminal expense. Now comparing that with the Seattle and Tacoma main line including terminals, we have 37.91 cents as the cost.

Mr. Clifford: But you didn't just give me a figure comparable with the percentage figure 15.85 cents on exhibit 38?

A. I would say that figure would be 19.33, which shows Seattle Tacoma main line excluding Puget Sound terminals.

Q. What is it including terminals?

A. 37.91.

Q. Now your main line figure.

A. Well, that is the figure I first quoted, the main line including the terminals was 37.91 and leaving out terminals 19.33. That shows the excess cost in there.

Q. Well, you couldn't say from that then that your main line operation was greatly more economical than your branch line operation when you include terminals?

A. Well, the trouble with that is, if you include the terminal charges in the Seattle Tacoma divisions it adds a much larger item and tends to bring up your cost.

Mr. Da Ponte: That is because these terminals are on the main line?

A. The Seattle-Tacoma terminals are all on those two divisions, [fol. 686] and naturally increase the cost to a great extent. That is admitted.

Mr. Da Ponte: Did you make exhibit Northern Pacific number Special 254 showing the relationship of taxes in this state and taxes in other states?

A. Yes, sir.

Mr. Da Ponte: I offer that in evidence as Northern Pac. exhibit #39.

(So marked.)

A. The intent of exhibit 39 was to indicate that the Northern Pacific paid a higher proportion of taxes in the state of Washington than in any other state. For instance, you will notice the various percentages indicate that to be a fact. The percentage, for instance, of road miles operated in the state of Washington is 29.11 per cent.

Mr. Da Ponte: That is the percentage of the system mileage in this state?

A. That is the percentage of the single track mileage operated.

Q. And the proportion of taxes which we pay are 38.41 per cent, that is the proportion of the system taxes?

A The proportion of the system state taxes. I have not included the federal taxes, but the state taxes only.

Q. What about per mile of road operated?

A. Per mile of road operated we show for the state of Washington $1,682.95, the highest of any state.

[fol. 687] Q. What is Montana?

A. $882.01.

Q. And it is double the Montana taxes?

A. Yes, it is double——

Mr. Henderson: About the same as Idaho?

A. The same as Idaho you say?

Q. About the same?

A. A little bit higher, yes. But I want to call your attention particularly to the fact that in the state of Minnesota where we have also expensive terminals, as I indicate, which are twice that of the west end terminals, the taxes are $1,401.25 per mile as compared with $1,682.95 in the state of Washington.

Mr. Da Ponte: Now in the state of Washington the percentage of gross receipts paid out in taxes is 11.14.

A. Yes.

Q. As compared with the s-ate of Minnesota which is 5.42% of gross receipts.

A. Yes, sir.

Q. Now the gross receipts basis is really considered the fairest indication is it?

A. I think that is fairer than the road mile plan, yes.

Mr. Da Ponte: I would like to make an explanation as a matter of law, that in Idaho the railroad property is assessed at full value and equalized with all other property on that basis, whereas in the state of Washington it is only 50%.

[fol. 688] Mr. Henderson: What has that to do with the percentage of taxes to gross operating revenue?

Mr. da Ponte: Everything to do with it, because in Idaho they pay on the full property. If they only paid on half the value in Idaho we would have one-half the taxes. It is not on a percentage basis in Idaho.

Mr. Henderson: It is the amount of taxes I am talking about, I don't care what the value is.

Mr. da Ponte: If you can't see that distinction I can't help you.

Mr. Henderson: It is the amount of money that costs——

Mr. da Ponte: Now if in Idaho we were paying on a 50% basis we would have one-half the taxes.

Mr. Henderson: No, you would probably have to double your taxes——

Supervisor Cleland: I understand in North Dakota they only charge on about 10% of the value.

Mr. Dudley: The rule of taxation is to charge what the traffic will bear.

Mr. da Ponte: Now in North Dakota the per cent of taxes is 9.72?

A. Yes, sir.

Q. Now the purpose of that is, on that same point, to show why in this state the operating costs are larger than on the system as a whole?

A. Yes.

Mr. Calderhead: You don't include your taxes in your operating expenses, do you?

Mr. da Ponte: They are included in this ratio aren't they?

[fol. 689] Mr. Calderhead: No.

Mr. da Ponte: If that is so it don't bear on the 130 ratio.

Mr. Clifford: Mr. Peterson, you are not prepared to state are you the peculiarities of the levy by which taxes are determined in these various states that you have listed?

A. No sir, I am not an authority on tax levies.

Q. You couldn't say whether full valuation or partial valuation was used?

A. I wouldn't want to say so.

Mr. Henderson: That doesn't really enter into the percentage of taxes paid to gross revenue because you are just simply considering the amount of taxes you pay, in dollars and cents, as compared with the amount of revenue you receive in dollars and cents?

A. Yes.

Q. So that the manner in which the levy is made doesn't make any difference, you are just considering the relation between dollars and cents?

A. That is all we are considering.

Mr. da Ponte: You have prepared a special Exhibit, No. 255?

A. I want to bring in this other memorandum first——

Q. All right, have you prepared an exhibit to show the percentage the traffic within the state of Washington bears to the interstate traffic, as compared with other states?

[fol. 690] A. Yes sir.

Q. Explain that?

A. I have here a statement that will be submitted later on in regular form, showing the intrastate and interstate traffic and the total in the state of Washington, from which it develops that the total amount of intrastate freight traffic per cent is 43.71% of the total, whereas in all other states it is only 12.98%, or a total for the entire system, including Washington, of 20.61%. In other words, the freight revenue, intrastate, is somewhat over 20% higher in the state of Washington than for the entire line including Washington. And similarly the revenue net ton miles, intrastate, State of Washington, are 27.62% as compared with 7.94% of all other states, and 12.05% for the entire line, including Washington. This is given as an indication or a partial explanation for the increased cost of operation in the state of Washington which Mr. Calderhead questioned. It is quite evident that if your intrastate business is so much higher your cost of operation must necessarily be also higher.

Q. And that is because the cost of doing the shorter haul intrastate business is greater than the cost of doing the longer haul interstate business, per ton mile?

A. Correct——

Mr. Calderhead: I don't think that follows, does it?

A. The cost of the local business——

Mr. Calderhead: The question Mr. da Ponte asked you and your affirmative reply was correct—you don't mean that, do you?

(Question repeated as follows:)

Q. And that is because the cost of doing the shorter haul intra-
[fol. 691] state business is greater than the cost of doing the longer haul interstate business, per ton mile?

A. Not per ton mile, no.

Mr. da Ponte: On what basis do you figure it?

A. The cost naturally would be less on the shorter haul on the ton mile basis.

Mr. Calderhead: Just another question, are you certain that the

average distance hauled in the state of Washington is less than it is in any other state on intrastate traffic?

Mr. da Ponte: Pardon me, I was comparing this in the state of Washington with the system business, which was the comparison Mr. Gray used and which Mr. Gray questioned——

Mr. Calderhead: I have no objection to the witness answering it at all except that I think that he really is misunderstanding the question; he must be.

Mr. da Ponte: I will put it again then. I got this idea from you yourself, and you suggested it to Mr. Gray, as to why these costs in Washington were higher than on the rest of the system.

Mr. Calderhead: I am perfectly willing to assume that if 40% of the business in this state is state business that the two terminals will have an influence, but certainly not the average distance haul, because I don't believe it is shorter in this state than any other state.

Mr. da Ponte: No, but I am making the comparison of the intra-

[fol. 692] state haul with the interstate system haul and you will certainly admit that the average haul intrastate is much less than the system haul in the state?

Mr. Calderhead: Yes.

Mr. da Ponte: That is what I am showing; that is the comparison with the figures showing that it cost 130% in this state to do state business as compared with interstate.

Mr. Henderson: Nobody made any contention on that, that it was 130% higher in this state for the average——

Mr. da Ponte: Yes, that is what I am stating now, and Mr. Gray stated on cross-examination that there was such a discrepancy, and this is a reply to that.

Q. Do you know what the average interstate haul is on the system?

A. I haven't the figures here.

Q. Have you the average haul on the system?

A. Yes. For the year 1920, the entire line, the average haul of revenue freight was 334.9 miles, and of all freight, including non-revenue, 322.15 miles. That is for the entire line.

Q. What is it within the state?

A. For the state of Washington it is 142.24 miles on revenue freight, and on all freight, including non-revenue, 147.71 miles.

Mr Dudley: Is that intrastate, in Washington?

A. That is both intra and inter-state.

[fol. 693] Mr. da Ponte: Now, then, I offer Exhibits 36, 37, 38 and 39 in evidence.

The Director: Any objection?

Mr. Henderson: No objection.

The Director: They will be admitted.

Mr. da Ponte: You have another copy of that last statement?

A. I have not yet but I will have this afternoon and submit them tomorrow morning.

Mr. da Ponte: Some of the exhibits offered have been on the

basis of the costs per estimated loaded car mile, speaking of Northern Pacific's Exhibit No. 18, and others have been on the cost per thousand gross ton miles basis. Most of the Milwaukee's Exhibits I think on that also, now what is the distinction between the unit of estimated loaded car mile and gross ton mile, and have you prepared an exhibit illustrating that?

A. I have prepared such a statement, shown as Special 255.

Q. Have you prepared Exhibit No. 255?

A. Yes, sir.

Mr. da Ponte: I will offer that in evidence, marked Northern Pacific's Exhibit No. 41; may that be admitted?

The Director: Any objections? It will be admitted.

A. In this particular exhibit, No. 41, I have tried to explain in a note at the right of the statement what causes the variation in the two factors, gross ton miles and estimated car miles, and briefly, it isd ue to *to* the fact that in figuring the gross ton mile costs you [fol. 694] take into consideration your tare weight and other certain factors that are not dependent on the weight of the car, that are not considered.

Q. What are those factors?

A. Generally speaking about 34% of your railroad operating expenses are more or less permanent, not dependent on the fluctation of the traffic.

Q. Is that true particularly with regard to the terminal charges?

A. With reference to the carriers as a whole and as a general term used but does not strictly apply to this particular cost, but it is a good approximation; about 34% is standard.

Q. That is to say, the costs of originating and delivering the traffic, known as the terminal costs, are constant, and do not depend on the weight of the car or the volume of business?

A. To a great extent, yes.

Q. And that is the reason for the difference between the results reached on the car mile and the gross ton mile basis.

A. Yes.

Cross-examination.

Mr. Henderson:

Q. That estimate you have just made with reference to computing on the car mile basis and the gross ton mile basis applies to these other exhibits like Exhibit 38, where you compare branch line [fol.695] with main line operations, and the other exhibits you put in, in which you have used the gross ton mile as the basis of your figures——

A. Yes, it will.

Q. So that these figures you have presented on the gross ton mile basis would be off if they were on the car mile basis, the same as you have demonstrated on Exhibit No. 41?

A. On the same basis, yes. Further remarking about the estimated

loaded car mile basis, some question was brought up at the last hearing as to the propriety of using two empty cars as one loaded car, and I have some data here in connection with another matter that I want to bring out. We have been compiling some data for use in another matter and we have secured the direct costs of the enginemen's wages and trainmen's wages and the fuel, and these costs covers the movement of iron ore from the Cuyuna Range to the Superior ore dock. The costs per loaded car of these three items amounts to $2.015, and the cost per empty car is $1.198, or approximately 60% of the cost of the loaded car. These are not estimated figures but actual figures taken from the time slips and the fuel reports, and it shows that the estimate of 50% is not out of the way, especially due to the fact that the ore operations are perhaps identical in some respects to the log traffic.

[fol. 696] Q. In other words in your Exhibit 18 in figuring costs it was assumed that the cost of moving two empties was equal to one loaded car?

A. Yes sir.

Q. And this study of direct costs you are just referring to now, indicates that it is in excess of that figure?

A. Yes sir.

Q. The cost of moving a loaded car is 60 per cent in excess of an empty car?

A. Yes sir.

Q. Now to get back, Mr. Henderson sought to give the impression that your other exhibits were out of the way because of the variation in the results achieved by using the estimated car miles and the gross ton miles,—those exhibits which you offered, to which Mr. Henderson referred, were merely offered on a comparative basis, were they not?

A. What exhibits?

Q. The ones Mr. Henderson asked you about?

A. They were all given on a comparative basis.

Q. So that the percentage would be the same whether you used the direct car miles or the gross ton miles?

A. Yes sir.

Q. And there is nothing that discredits those exhibits?

A. No, not at all, they are all worked out in the same way.

[fol. 697] Mr. Henderson: Now let's see; Exhibit 41—in that exhibit you show under the gross ton mile basis a net operating deficit of $288,054.00, is that right?

A. Yes.

Q. And under the car mile basis you show a deficit of $522,735.00, is that correct?

A. Yes.

Q. So the percentage does not remain the same where you use the gross ton miles or the car mile basis, does it?

Q. As to the percentage of cost do you mean?

Q. Yes.

A. The cost would vary——

Mr. da Ponte: You are confusing him——

Mr. Henderson: I am not, I am trying to get some information. Now in reference to your ore movements, what does the car in which that ore moves weigh, in comparison with a log car?

A. Well, we figure the log flats weigh 14 tons.

Q. What do you figure one of those ore cars weigh?

A. They weigh in excess of that figure. I haven't the exact figures here.

Q. So that the cost of moving one of those empty cars would probably be greater than moving the log flat?

A. I am speaking about the ratio; I am not trying to identify these costs; we are simply trying to explain the ratio in the matter of loaded car miles.

[fol. 698] Mr. Calderhead: How much weight is put in one of these cars?

A. About 50 tons of ore.

Q. What does the ore car weigh?

A. 18 or 19 tons.

Q. Doesn't it weigh 26 tons, 56,000 lbs.?

A. No sir.

Q. Now your carload of logs weighs around 35 tons and your empty car 14 tons?

A. We are assuming 34 tons as the weight of a carload of logs; that would be 48 tons, taking in the tare weight.

Q. Now doesn't that give you your comparison?

Q. Doesn't it appear to you as though the relationship between the two would remain the same as between the empty and loaded, both ways?

Q. Wouldn't it give you your comparison as between a carload of logs and a carload of ore with the empty car of each?

A. Suppose we consider that difference in the matter of weight, even so we are only assuming 50% of our loaded car; so that even then you were allowing for the difference in weight, if you insist on that. I was merely trying to show that 34, while more or less of an arbitrary figure——

Q. Now wouldn't your ratio amount to a little more than 50% for the movement of the empty car?

Mr. da Ponte: Isn't that assuming that your costs had been solely on weight.

[fol. 699] Mr. Calderhead: Probably it has a great deal to do with it.

A. Weight undoubtedly has something to do with it.

Mr. da Ponte: Yes, but not everything.

A. Mr. Henderson tried to reduce that to a basis of tare weight instead of cost of services, and, as I outlined before, about 34% of our expenses are standard and fixed.

Mr. Calderhead: But what does that fixed charge consist of, you explained it as a terminal charge?

A. No, I say that 34% of the expenses of a railroad are ordinarily assumed to be irrespective of traffic costs.

Q. What does that consist of?

A. Take maintenance of way; a great deal of the maintenance of way is irrespective of your traffic movement.

Q. Then it was not, as you stated a while ago, altogether in the terminal expense?

A. Absolutely not. It is what we call the fixed charges against the operation of the road and not terminal, no sir.

Mr. Henderson: In moving the ore traffic wouldn't a large amount of that time — expense which you refer to there be accounted for by the fact that you may move a train of ore loaded but going back you could haul more if you had the cars, but you only have so many cars and you have to assign a train to them, while in the logging movement you have a full trainload?

A. My experience has been of this ore train that they are hauling all they can. This is based on 1920, and fundamentally is for both [fol. 700] the log and the ore traffic, and the figures were exceptionally low, and I went into that. I do know they were hauling back an exceptionally large number of cars in the train.

Mr. Henderson: Is that hauled in solid trains or do they make any mixed trains the same as logs?

A. This par*y*icular exhibit here was based entirely on exclusive trains.

Q. So that in going back your difference would be from the fact that you didn't have a full train going back, is that right?

Mr. da Ponte: Now do you know how the traffic moves, whether it is in full trains or not?

Mr. Henderson: Let the witness answer.

Mr. da Ponte: If he knows. Mr. Capron knows.

A. Well, this feature of the return movement of the ore cars Mr. Turnburke has made a special study of the ore rate case, and perhaps he has the information, but I do know off hand that they were moving back those empties in about as full loads as they could in 1920, because they had heavy business; but this cost, as covered by the foot note, is based on the actual cars handled in exclusive log trains and doesn't take into account the somewhat higher costs of handling the other commodities.

Mr. Balmer: Mr. Peterson do I understand from your answers that you have some actual acquaintance with the way the ore movement was handled on your line in 1920?

A. We have through our accounting representative who was up there, yes.

[fol. 701] Q. Now Mr. Henderson asked you some questions intimating that possibly the return empty movement of those cars might not be filled out to full train tonnage. I want to ask you if it is not a fact, according to your information, that the limit of empty

ore cars they handle in those ore trains is the limit of the train tonnage?

A. That is exactly so I think, yes.

Supervisor Cleland: What do you mean by that?

Mr. Balmer: I mean there is never any possibility of failing to fill out the train to the full tonnage that the engine can handle, that the train has an empty movement of ore cars equivalent to the full number of cars it can haul.

Mr. Henderson: What do you do with your power going back if you haul your empty movement to the full tonnage of your engine going back you are going to pile up a lot of empties you can't use or else you are going to pay a crew of deadheads somewhere along the line.

Mr. Balmer: Now you are making a statement in the shape of an argument, suppose you put that to the witness, you were kicking about Mr. da Ponte's attempting to answer some questions.

Mr. Calderhead: Do you charge in your empty car movement the train crew's expense in running light to the point of loading?

A. Yes.

Q. So that you actually in this empty car movement practically include the same number of cars going back empty as though they actually did go back empty in one train?

[fol. 702] A. Yes sir.

Q. If they hauled 40 loads in they could just as well have hauled 40 back?

A. Yes.

Supervisor Cleland: That is the way they figure it do they?

A. Yes sir.

Q. And charge the same expense?

A. No, not the same expense. That was the very point I tried to bring out there, was the fact that the cost for the empty car is about 60% of the loaded car in returning.

Supervisor Spinning: It moves faster?

A. Yes it moves faster and requires less fuel and various other factors and they make better time. But that is argument. It is about 60% of the loaded car, moving the empty car.

Supervisor Cleland: Then as a matter of fact you don't haul back the tonnage that the engine can pull?

A. Yes, I think so.

Q. How is it physically possible to haul back 20 loaded cars and haul only 20 empties?

Mr. Balmer: Because the grade is with you one way and adverse the other way; it is adverse to the empty.

Supervisor Cleland: That has not been shown; what are the physical conditions with reference to the movement of this ore?

[fol. 703] A. Why I have not gone into the matter very extensively because we were not greatly interested in the matter, but I think Mr. Balmer just made the statement or explanation; it is a matter of grades.

Q. Do you know anything about the grades?

A. I do not, I have not been up there.

Q. Then if you don't know anything about it how do you make the figures?

A. These figures were submitted to us as the cost of running these trains. I didn't make them directly; they were taken from superintendents' figures.

Q. As far as you know then these cars both move on a level grade?

A. Yes.

Mr. Capron: Mr. Peterson's figures are Northern Pacific figures, and Mr. Balmer was talking about the conditions on the Messaba Range on the Great Northern Railroad.

Mr. da Porte: While we are on this I will ask Mr. Capron to state which way the grades are.

Mr. Capron: On the Great Northern from the Messaba Range the grade into Duluth the grade is with the load, but from the Cuyuna Range on the Northern Pacific the reverse is the case. The empties on the Great Northern travel over an adverse grade. The empties on the Northern Pacific are on the down grade, that is, generally speaking.

Mr. da Ponte: So you can handle more cars coming back?

Mr. Capron: But the movement on the Northern Pacific is a main [fol. 704] line movement and the empties are going back at the time of the year when freight is coming in over the lake from the east and they have full tonnage trains west.

Mr. Henderson: Well, that explains what I was trying to get at, that it was not an exclusive ore movement?

Mr. Capron: It just depends on the operation, just how fast the ore cars are unloaded; if there is not enough empties to make up a solid train of empties there is always enough freght to fill up the train.

Mr. Henderson: Then these figures were not compiled on ore handled in exclusive ore trains, on a strictly ore movement alone?

Mr. Peterson:

A. The present figures were compiled on ore handled in exclusive ore trains but do not include freight on other commodities.

Mr. da Ponte: In other words these figures were made for the very purpose of showing the cost of moving the empty cars?

A. Yes, they were exclusive trains of empties going back.

Q. By the way now, have you made any comparison of conditions of the first six months of 1921 as compared with 1920?

A. Yes.

Q. Have you prepared Exhibit No. 269 Special, showing the cost of operation on the Seattle and Tacoma Divisions, six months ending June 30, 1921?

A. Yes, sir.

Mr. Da Ponte: I will offer that exhibit in evidence as Northern Pacific's Exhibit No. 42.

The Director: Any objection?
[fol. 705] Mr. Henderson: No objection.
The Director: It will be admitted.

(Admitted and Marked N. P.'s Ex. No. 42.)

Mr. da Ponte: Please explain that exhibit.

A. The purpose of this exhibit is to show that the costs of operation on the Seattle and Tacoma Divisions have not changed materially from the figures shown in Exhibit No. 18, covering the cost of operation for 1920. You will note that the figure quoted for the year as the cost per estimated car mile is 38.82 cents compared with 38.05 cents for the six months of 1921. The principal idea was to show some later figures than the close of the previous statement. These figures, of course, don't include the reduction of July 1st in the wage situation, being for the first six months of the year. You will note that they show a deficit from operation of $15,817.00 without any proportion of taxes or return on the property investment; that is figuring on excluding the terminals.

Q. That is excluding the Puget Sound terminals?

A. Yes, excluding the Puget Sound Terminals; including the terminals it would amount to $76,275.00.

Mr Henderson: Could you state off hand the comparative amount of traffic on those two railroads?

A. Yes, we have a statement here that will give the information on that; I will submit it later on.

Mr. Clifford: Do I understand that the percentage of 18.72 is the cost per estimated loaded car mile exclusive of terminals, and that the percentage 38.05——

A. 38.05 doesn't include terminals, that is the branch line cost, [fol. 706] and I quote that because of the preponderance of the movement on the branch lines. The main line, excluding terminals is 38.05, but the branch lines has practically 75% of the log business. You will notice I have shown the division here of the estimated loaded car miles between main and branch lines, showing the separation—380,480 for the main line and 1,149,394 for branch lines. That shows the relative movement over main and branch line tracks.

Q. Well, doesn't the comparison between the percentage 34.61 and the percentage 18.72 give a fair idea of the different cost, of the terminal cost?

A. Absolutely, yes.

Q. Now, taking the entire statement, wouldn't you say that to make a showing of costs that would be entirely fair to the log traffic, considering the fact that the log traffic is moving within a terminal division, that allowance should be made for the increased cost upon any particular traffic when considered in a terminal division?

A. Absolutely.

Mr. da Ponte: I will admit that Mr. Clifford, that is the very thing we are contending for, that the logs should be charged with their proportion of the terminals.

Mr. Clifford: You are not talking about the same thing that I am and that is not what the question was.

Mr. da Ponte: Tell us what you said on that——

A. The fact of the matter is the terminal expense as shown here is rather high; it is admitted it is 16 cents per estimated car mile.

Mr. Calderhead: For the average length of the haul?

[fol. 707] A. Yes, and it wouldn't of course, be correct to assess all of that to any particular commodity, we admit that.

Mr. Clifford: Certainly. But considering now a terminal division and what we might call an intermediate division, is it fair to say that you can take any particular commodity moving locally in a terminal division and assess it at a prorated cost of all costs incurred in that terminal division, and say that that is a fair rate of costs assignable to that commodity?

A. There are certain costs, of course, that are overhead expenses; are you referring to direct terminal——

Q. I am comparing now a terminal division and an intermediate division, one which is not burdened with terminals.

A. Yes——

Q. And I am asking if it is a fact if you arbitrarily determine the cost figures as for any particular commodity moving solely within a terminal division with respect to the lighter costs upon intermediate divisions, if you unduly load that commodity with costs?

A. Yes, you are correct.

Mr. Balmer: Let me ask you a question suggested by the answers you have just made. Now the line which is serving all these terminals which increases your division costs, serves not only the logs or other particular traffic which may be under consideration in any rate case, but also serves a great deal of traffic that is originated by those terminals, does it not?

[fol. 708] *Q.* You mean local, within the terminals do you mean?

Q. I mean that the division on which the logs or other traffic under consideration moves serves not only those logs but also serves the other traffic which has originated on that division?

A. Yes.

Q. And if it were not for that traffic originated by those terminals the unit cost of operating on that division as applied to the logs or other traffic under consideration at the particular time would be a great deal higher would it not?

A. Absolutely.

Mr. Henderson: On the contrary if you didn't have that log traffic here——

Mr. Dudley: Just a moment, I want to but in on this game. Calling your attention to Exhibit No. 42, you show an operating expense there of 38.05 on the branch lines?

A. Yes, sir.

Q. That doesn't include the terminals?

A. No, sir.

Q. On the main line including your terminals you show 34.61?

A. Yes.

Q. Now how is it then that the branch lines which do not include the terminals show a greater percentage of operating costs than the main lines including the terminals?

A. Simply because of the less density of traffic.

[fol. 709] Q. That is because of the proposition involved in Mr. Balmer's question, that the traffic created by the terminals, either brought to or taken away from the terminals, reduces your average operating expenses?

A. Yes sir.

Q. So that it more than offsets any increased expenses chargeable to terminals expenses?

A. Yes, I think so.

Mr. Henderson: If you didn't have that log traffic in there the rest of the traffic would have to bear the larger expense?

A. Yes and you could apply it to all and leave them out one at a time and get nowhere——

Q. Yes, but if it were not for the other traffic the log traffic would have to bear a greater burden—I thought you said it would; now, then the log traffic doesn't participate in the use of those terminals to the extent that the other traffic does?

A. We admit it don't.

Q. So that the terminals are not as necessary for the log traffic as they are for the rest of the traffic?

A. No they are not.

Mr. Clifford: And if you didn't have terminal divisions on the transcontinental roads you would not have any use for intermediate divisions; the whole thing is reciprocal?

A. Yes.

Mr. Calderhead: Now let me ask you one question with reference to Exhibit No. 42?

A. Yes?

[fol. 710] Q. You have costs in cents per estimated loaded car miles, Seattle and Tacoma main line 34.61.

A. Yes.

Q. In the last column you show 38.05 cents as the estimated loaded car miles, Seattle and Tacoma branch lines, does that include the terminal?

A. No sir, it doesn't.

Q. So that the difference between 34.61 and 18.72, which would be 15.89, added to 38.05, would make 53.94 cents as the cost in cents per estimated loaded car mile, branch lines, if you included the terminals?

A. No, I wouldn't work it that way. You have here 38.05 as strictly your branch line costs; now the cost of the main line and terminals is 34.61. It is based entirely on a different factor than your branch line movement.

Q. So that to arrive at the cost in estimated loaded car miles on logs you would first have to get the number of miles travelled on the branch line?

A. Exactly.

Q. And if the logs moved into a terminal you would have to apply

the factor of 34.61 to the number of miles of main line moved into the terminals. In other words if it moved 10 miles on the branch line you would apply 38.05 as the cost on the branch line, and if it moved 10 miles further into the Seattle terminal you would apply 34.61.

A. We are doing that in another way. We apply the cost of the estimated loaded car mile against the log traffic as follows: We take [fol. 711] the branch line, we have 1,149,394 estimated loaded car miles on the branch lines alone. We apply against that the cost of 38.05 cents, giving it the cost of $437,344.00; that is out and out branch line movement. Then we have only the main line movement participating to a smaller extent. On the basis we have shown here, you notice we show 380,480 estimated loaded car miles for the main line, which we have applied against the 34.61 as the main line cost. That is the way the figures are built up. It would be unfair to apply it in any other way, and you will notice that the proportion of main line there is very small in comparison with the entire cost, very small.

Mr. da Ponte: Well, then, to finish that thought, when you have made up your total costs showing these statistics you only charged the log traffic with the expense of these terminals upon the basis that the number of cars moving into the terminals, of logs, bore to the entire cars, about 15%?

A. Not necessarily, no; the 15.48% is the number of log cars handled in that period, that is all; but in arriving at these proportions we simply took it that if 380,480 car miles were made over the Washington main line, that they should stand their proportion of that terminal expense prorata.

Q. What was that proportion?

A. Well we used the actual cost of 34.61 which included the actual overhead charge. In other words they were advanced share and share alike, on that.

Mr. Henderson: Do you know what the comparison of the traffic for the first six months of 1921 would be to the last six months of 1920?

[fol. 712] A. I have the first six months, or rather the first seven months compared with 1920, but I have not the last six months by months, but I will get that for you.

Q. That might have a bearing upon unit costs, wouldn't it?

A. Yes, very much.

(Recess for 5 minutes.)

Mr. da Ponte: Have you prepared an exhibit indicating the revenue from the log traffic for the first seven months ending July 31, 1921, as compared with 1920?

A. Yes sir, covering the log traffic in the state of Washington only.

Mr. da Ponte: I will offer that as Exhibit No. 43.

Mr. Henderson: No objection.

The Director: It is admitted.

A. Exhibit 43 shows the actual revenue received for the seven months ending July 31, 1921, on the Washington intrastate log traffic, with the intention of making comparison with the similar months of last year, but due to the change in rates it was necessary to equate that amount received, as I have shown, the actual amount received, $752,059.00 being increased by 25% or $188,015, making a total of $940,074.00 as compared with $543,187.00 for the same period in 1921, showing a considerable falling off in the log traffic as a whole.

Q. That would show, then, that a schedule compensatory for 1920 would be lacking in 1921?

[fol. 713] A. It would, yes, showing a lesser movement.

Mr. Clifford: I would like to ask the witness another question about Exhibit No. 42: to what extent does labor costs enter into the showing of cost of operation that you made in Exhibit No. 42?

A. The labor feature of it you mean?

Q. Yes.

A. Well I should say about 60%, from my observation.

Q. And that would be true of interstate and intrastate?

A. Yes, the general average—that is the general average we used, yes.

Q. This statement No. 42 I notice is for the six months ending June 30, 1921?

A. Yes sir.

Q. On July 1st, 1921 the Railroad Labor Board ordered a reduction in wages?

A. That is correct.

Q. Of what amount?

A. Well, according to our figures it approximates 11.25% for the month of July, as close as we can figure it.

Q. So that a period selected subsequent to 1921, when those months had expires, would show a considerable change in cost of operation due to that factor?

A. It certainly would. I made that statement for July but some objections were made from the Milwaukee standpoint and it was not admitted. The traffic for July was a very unfavorable showing.

Q. I am interested now in the difference in actual dollars and cents that that would make?

[fol. 714] A. I know you are.

Q. You say labor costs is 60% of your showing?

A. Approximately.

Q. And the reduction in percentage of wages was approximately 11.25%; what would you say would be the reduction in the percentage of total cost of operation?

A. Well I would take 11.25% of the 60%; say roughly 7%.

Q. Of the total?

A. Of the total amount, yes.

Mr. da Ponte: Now this Exhibit No. 42 didn't include that reduction?

A. No sir, that would be from the actual figures.

Q. But your other exhibit, Exhibit No. 18, that took account of that reduction?

A. 18?

Q. Yes?

A. No, No. 18 covered the year 1920, didn't it. That, of course, is based on the increased wages of 1920, and he is speaking about the reduction of July, 1921. I did make up a statement however—I didn't produce it at the last hearing here, a revised statement of September, October and November, showing the probable effect of that wage reduction; and the figures that were submitted at the last hearing, Exhibit No. 19, I think it was, it shows the seven months on the basis you are speaking of; but the figures, of course, were tentative; we don't know exactly what they would be.

[fol. 715] Mr. Clifford: So that the figure of 7% would be somewhere near just breaking even, and a fair return, wouldn't it?

Mr. Balmer: You had better look at your figures before you answer that.

A. No sir.

Mr. da Ponte: The witness can answer that all right.

A. That will involve quite a long computation. I can figure it out but it will take some little time to figure it out. If you reduce the amount shown there for say the branch lines, 1,529,874 by 7%, and assume for the moment that your branch line tra-fic is your log traffic, then you could get your cost per car mile and apply that to your total log car miles, that would represent your reduced costs and would show you whether or not there was any particular gain in the operating expenses——

Q. Over how many months' operation could you spread it; that is the difficulty as I see it; the wage reduction was only granted on July first.

A. Well your idea was to make the six months on that same basis, to show what the effect would be if it had been in effect on January 1, 1921; that would mean for the entire period, naturally?

Q. That would be one way of figuring it.

A. Yes, naturally.

Mr. Clifford: If the Department would be interested in those figures and wanted them could you prepare them?

A. I can submit it tomorrow morning.

[fol. 716] The Director: It might be well.

A. I will do that.

Mr. da Ponte: Now did you prepare an exhibit illustrating why the expense of the short haul was greater in proportion to the revenue than the expense of the long haul?

A. Yes sir.

Mr. da Ponte: I offer that as Northern Pacific's Exhibit No. 44.

(Admitted and marked N. P.'s Ex. No. 44.)

A. The intent of this Exhibit No. 44, it being an extract from a certain document, is to show the relative cost of a 10 mile haul as compared with a 1000 mile haul.

Q. That is per ton mile?

A. Well, the ton mile cost, yes, cost per ton mile. The figures, of course, are not original in this case; this exhibit is merely to show the relationship in a 10 mile and a 1000 mile haul.

Q. What is the terminal expense for a 10 mile haul?

A. Figuring on the basis of 30 cents per ton and a movement on both ends, it would be the same in both cases, 60 cents.

Q. And how much per ton for a 1000 mile haul?

A. Well it would be the same figure naturally on the 1000 mile haul.

Q. Do you mean per ton mile?

A. Yes.

Q. And they have an extra or greater cost per ton mile on the [fol. 717] shorter haul than on the longer haul?

A. Yes.

Q. The figures are purely arbitrary?

A. Yes sir. Now the point is, that taking a 60 cent terminal charge in a short haul makes the short haul cost or a 10 mile haul 66 cents; and observing the same charge on a 1000 mile haul we get $6.60.

Q. In other words, the cost including the terminal handling is only ten times as much on a haul one hundred times as far.

—. ——.

Q. And that relation would apply all the way through?

A. Generally speaking yes; it is a fair average.

Q. Did you prepare Special Exhibit 268 showing the statement of intrastate movement of logs for the six months ending June 30, 1921?

A. Yes.

Q. What is the purpose of that?

A. We wanted to determine what the traffic revenue would be for 1921 on certain prescribed rates.

Mr. da Ponte: We offer this as Northern Pacific's Exhibit No. 45.

The Director: Any objections to No. 44. It will be admitted.

(Marked N. P.'s Ex. 44.)

The Director: Any objection to Exhibit No. 45? It will be admitted.

(Marked N. P.'s Exhibit No. 45.)

Mr. da Ponte: Now that shows the point to point movement of cars for the first six months of 1921?

A. Yes.

[fol. 718] Mr. da Ponte: You have a statement showing the same thing for the year 1920 have you not?

A. We have a statement prepared and submitted showing eleven months of 1920 but not the entire year.

Q. Now what is the purpose of this exhibit?

A. We have prepared a statement and exhibited at this hearing, showing the cost of operation for six months, and it was desired to get the amount of revenue from the point to point movement to complete the showing for the period.

Q. Have you prepared a statement showing the comparison of the log business for the years 1917 to 1920?

A. Yes.

Mr. da Ponte: I offer that as Northern Pacific's Exhibit No. 46.

(Admitted and marked N. P.'s Ex. No. 46.)

A. This exhibit covers the movement of the tons of intrastate logs for the years ending December 1, 1917 to 1920, and the intention was to show that the year 1920 was abnormally high as shown by the 138% of the 1917 traffic, and it will also appear that the six months ending June 30th is just about approximately one-half of the 1917 business.

Q. Now, then, did you make an exhibit or statement to show what rate would be required to return 6% on the value of the railroad property devoted to the log traffic?

A. Yes sir.

Q. Now that is composed of a number of sheets?

A. Yes sir.

[fol. 719] Mr. Clifford: I want to ask Mr. Peterson one more question on Exhibit No. 46, that is the exhibit having to do with the Washington intrastate tonnage. What basis did you use for determining the tonnage of that exhibit?

A. You mean the weight?

Q. Yes?

A. At the present time we are using 68,000 pounds or 34 tons to the car, that is for 1921. In the previous years they had different bases but I understand that as far as tonnage is concerned they are on a variable basis; they just changed the figures recently. The four years shown are on the same basis, so far as tonnage of the cars. I inquired about that feature and was told there was no change shown, that 1921 was on the same basis, 34 tons.

Q. What was the basis in the years prior to 1921?

A. I think they used 63,000 to 65,000 pounds, I was told in 1921 they changed it actually to 68,000 pounds.

Q. Then the record can show that in the years prior to 1921 it was 63,000 to 65,000 lbs.?

A. That is correct.

The Director: We will adjourn to 1:30.

[fol. 720] Met pursuant to adjournment at 1.30 p. m. Oct. 25, 1921.

Q. You have offered in evidence a large number of exhibits showing, or tending to show, the cost of this traffic, and returns received, so as to show the result of this log operation, and exhibits have been offered showing the rates applicable, for point to point movement, and a complete showing has been made leading up to the conclusion sought to be established to the effect that these rates are far from being compensatory. Have you prepared an exhibit showing what rate it would take to be compensatory, assuming that the traffic to which the compensatory rate is to be applied was the same as it was for the year 1920?

A. Yes, sir.

Q. I hand you a statement which will be marked N. P. Exhibit 47, composed of six sheets. Now explain the first sheet, sheet No. 1.

A. Sheet No. 1 is the first sheet of two sheets explaining the method in arriving at a compensatory rate, or scale of rates, and particular attention is called to the fact that in getting out this schedule it was first necessary to equalize the rates of 1920 on account of the change on August 26. I have taken the actual revenue for the year, to which I have added——

Q. The actual revenue is $862,000,000, as shown on exhibit 18?

A. That is only for January to August, not for the entire year. I increased that by 25%, to take care of the increased rate; September to December I add the actual figures, and get $1,524,460 as of 1920, equated to basis of same rates being in effect during the entire year.

Q. That shows the revenue that would have been received had the 25% advance been effective during the entire year?

[fol. 721] A. Yes, sir; to that I have added $16,600 which was the amount of switching and demurrage reported for the year, making a total of $1,541,060. To get the required return we have shown operating expenses as shown on previous Exhibit 18, (but the amount shown actually includes terminals for these present divisions) $1,848,210.00 Debits and credits that I show are for the purpose of analyzing the wage situation; that is, to put the year 1920 on a present basis as of July 21, 1921, to take into account wage reductions as ordered by the Labor Board, Decision 147. Therefore as far as operating expenses are concerned, wages are on the same basis as in the present case. Taxes are shown in a special statement, $166,619.

Q. The amount deducted for labor board decision is $134,154.

A. Yes, sir.

Q. Your taxes, how did you get them?

A. They are exactly explained on page 3.

Q. Explain, how did you get your taxes?

A. The proportion of the State of Washington taxes to the gross revenue in this state for the year was 11.14 per cent. I have applied that percentage to the actual revenue received from the log traffic, not weighted revenue, but actual revenue for the year.

Q. It is found that revenue in the State of Washington was twenty nine million dollars plus—and the taxes——

A. Yes, sir.

Q. And the taxes paid to the state were three million?
A. $3,260,000.00.
Q. Which was what per cent of the gross receipts?
A. 11.14.
[fol. 722] Q. You took as applicable to the taxes, that part of the value of the property devoted to log traffic, 11.14 per cent of the gross receipts from the log traffic?
A. Yes, sir.
Q. Is that a fair and accepted basis?
A. It is accepted in various cases; in particular the North Dakota coal rate case.
Q. What does that amount to?
A. $147,658.00.
Q. Where did you add that to operating expenses?
A. It is shown on the bottom of the first sheet.
Q. What does that figure give you?
A. It gives a total of $1,945,058, as operating expenses and taxes.
Q. Did you deduct the amount of revenue from that figure?
A. Yes, sir; it gives a deficit of $403,998.00.
Q. You deducted the total revenue $1,541,060 from the total operating expenses and taxes?
A Yes, sir.
Q. That left a deficit of $403,998.00?
A. Yes, sir.
Q. For the year 1920, after you had made allowance for increase in rates and decrease in the wages?
A. Yes, sir.
Q. Then you may pass on to the next sheet, sheet two.
A. Sheet 2 purports to be the amount of return covered by the transportation Act, six per cent of invested property applicable to the log traffic. Details of this amount as shown are found on a separate statement.
Q. Six per cent return on the investment would give $1,037,751.
A. Yes, sir.
[fol. 723] Q. That is the amount which would have to be earned to produce six per cent on the property devoted to the log traffic?
A. Including terminals, yes, sir.
Q. You have an operating deficit?
A. Yes, sir.
Q. Total, $1,441,749.00?
A. That is additional revenue required to give a return of six per cent.
Q. And to take care of the operating deficit?
A. Yes, sir.
Q. Where did you get the valuation upon which you have computed this six per cent?
A. Page 4 shows summary of valuation as used, and the first item on there, valuation of line and structures as per exhibit.
Q. That is the exhibit that Mr. Bryan identified which was computed for the purposes of the Federal valuation?
A. Yes, sir, and is based on cost of reproduction of property.

Q. That is where you got your valuation of the property?
A. Yes, sir.
Q. You omitted the Hartford and Monte Christo line?
A. Yes, sir.
Q. Because that line is not being now operated by the Northern Pacific—it was lost?
A. Lost in June, 1915; it does not seem proper to include it in the valuation for six per cent return, and it was omitted.
Q. Then you have added the valuation of the land?
A. The valuation of the land—are the figures Mr. Allen referred to yesterday, and are based on naked value only, taking no account of railroad value—74.60 per cent.
[fol. 724] Q. Is that on the I. C. C. division?
A. Yes, sir, but based on territory at present unvalued, and if you take the state figures, you will find a slight variation in them—a little over 75%, but it is based on operating expenses; lines West of Ellensburg, excluding Oregon, if you take the figures it would be very close to that.
Q. After deducting the amount assignable to passenger business, you have a total value of these lines on the divisions in controversy of $97,173,850.00?
A. As the amount assigned to freight.
Q. What is the next account?
A. Actual car mile investment, as we have computed it for Seattle and Tacoma division, in Washington,
Q. What is that?
A. To get the proportion of log car miles to total freight miles, so as to assign that portion to the log traffic, which in this case amount to 15.34 per cent——
Q. 15.35? That is the proportion of the total valuation which you have asigned to the logging traffic?
A. Percentage of logging, proportion.
Q. That is the proper and accepted way of allocating value to various kinds of traffic?
A. There has been no accepted way, but from all standpoints that is the most fair proposition. You cannot use revenue; after paying expenses and repairs, it gives condirions as nearly as can be determined.
Q. That was decided by the Supreme Court of the United States—that you can not use revenue in a case of this kind?
A. No.
Q. Percentage of log traffic is 15.35 of the total? What is the [fol. 725] amount of the value of the property devoted to log traffic on that basis?
A. Value of property and lines excluding all equipment, $14,916,186.00.
Q. That is the value of the property exclusive of equipment on which you are going to get a return of six per cent?
A. Yes, sir.
Q. Where did you get the equipment value?
A. It was compiled by the superintendent's office and is based on

the value of the average freight cars in logging service; that is, it is based on the cost of reproduction. All locomotives and cabooses have been assigned on a percentage basis, in this manner; as shown on the statement, 11.71 per cent of cost of reproduction of locomotives and cabooses has been assigned to log service; for the year 1920 we determined the actual gross ton miles made over the Seattle Tacoma Divisions and the proportion of gross ton miles made in the log traffic, and that 11.71 is based on that figure; in other words the gross ton mile proportion.

Q. So you assigned of the value of the equipment, to the log traffic, 11.71 per cent because that was the proportion of gross ton miles made in the logging traffic as compared with all the traffic?

A. That is correct except as patent log cars were used on the average cars in service.

Q. That is the way you got the value of the locomotives and cabooses?

A. Yes, sir.

Q. How did you get the value of car equipment?

A. Cars were determined on the average number? I did not pre-
[fol. 726] pare that statement myself, but it was based on the average number of log cars.

Q. Mr. Albee testified as to the average number of cars on the divisions; that is what you have used?

A. I do not know; since he made up the statement, perhaps it had better be left to him.

By Mr. Da Ponte: Mr. Albee had to attend a meeting of general managers in St. Paul, and I wonder if you gentlemen will agree that this information may be used. It is furnished by Mr. Albee. I will try to get him here before the close of the case.

By Mr. Henderson: I will agree that he would testify to that, but I won't agree as to the value of the equipment.

A. That gives the total value of the equipment and this service charged to all traffic, of $17,295,851.00.

Q. That is the total value of the railroad land and equipment?

A. Yes, sir.

Q. What is six per cent of that?

A. $1,037,751.00.

Q. That is the figure shown?

A. That is the figure shown on sheet 2, at the top of it.

Q. Can you state what Mr. Albee's figures were for the value of this log car equipment?

A. The amount stated for logs, reproduction cost basis, $1,828,-
400.00.

Q. I mean value per car?

A. You mean original cost? That is reproduction cost.

Q. Original cost?

A. Original cost of same was something like $910,260.00.

Q. I want the value per car?

A. Per car, you mean?

[fol. 727] Q. Yes, sir.

By Mr. Henderson: That is the present value of reproduction?

A. Original cost of log flats was $600. Reproduction cost is twice that, or $1,200.00.

By Mr. Henderson: Which figure did you use in determining value?

A. $1,200 cost, reproduction cost.

By Mr. Da Ponte: I think that is reproduction cost less depreciation.

By Mr. Henderson: That is what we want.

By Supervisor Cleland: He testified it is a valuation made up on 1914 basis, and this is the same value based on pre-war prices.

By Mr. Henderson: I want to know if that is the figure on a new car or present price on an old car, none of which were built since 1916.

By Supervisor Cleland: I am interested in the figure on depreciation.

By Mr. Da Ponte: The $1,200 figures compare to the figure of Mr. Nicholson, which he put at $2,500.00.

By Mr. Henderson: I want to get at that figure.

Q. That explains how you got your values upon which you figured the six per cent return?

A. Yes, sir.

Q. What is the next step in the progress of this?

A. The next plan was to get a compensatory return excluding Puget Sound terminals on Puget Sound division.

Q. Have you got anything covering that?

A. It is the same as referred to last, on the other side of the sheet, excluding the Puget Sound, except that I have eliminated [fol. 728] from track and structural values the values of the Auburn, Seattle and Tacoma terminals.

Q. That is shown in the red column on page 4 of the exhibit 263-A?

A. Yes, sir. The valuation of the land as shown, $5,580,267, excludes the Puget Sound Division in its entirety and takes in only the Seattle and Tacoma Division proper.

Q. What is the total value, excluding Puget Sound Terminals, upon which you figured compensatory rate?

A. We assigned to the freight proportion 69.86 per cent, or $69,214,152, which freight proportion you will notice is somewhat less than that used if including the Puget Sound Division, and that is due to the fact that this ratio excluding the Puget Sound Terminals is also on freight service. That gives $69,214,152 as freight proportion. Assigning to log traffic 15.35 per cent of that same figure gives us $9,396,372 as the amount assignable to log traffic for the structures, track and land. By adding equipment, same as on preceding sheet, we get a total of $11,776,037, on which 6% gives us $706,562, and that amount appears on the summary exhibit.

Q. So that your equated revenues for 1920 on a per cent basis are $1,541,060, is it not?

A. Yes, sir.

Q. These added together, give you the total operating expenses?

A. Operating expenses stated on this special exhibit 18, showing operations for the year are $1,626,922.

Q. Then you have deducted the proper amount to equalize the wage decision?

A. Yes, sir.

Q. That gives you net expenses of $1,572,493?

A. Excluding terminals, yes, sir.

[fol. 729] Q. You have added taxes?

A. Regarding taxes; I reduced taxes on this basis; I took the proportion of the valuation as shown here on this page 4, of $9,396,372, as of $14,186,186, including logging flats, and used that percentage, which seems fair enough.

Q. You have added taxes in proportion to the value of the property?

A. Yes, sir. That gives us a total operating expense of $1,677,480.

Q. What is the deficit?

A. Excluding terminals, $136,420.00.

Q. That is compared with the deficit in the other column including terminals?

A. Yes, sir.

Q. What additional revenue is required to produce six per cent return on the value of the property including terminals?

A. $842,982.00.

Q. All shown on page 5?

A. Yes, sir.

Q. What is the balance of these figures?

A. Summary, shown at the bottom, gives amount of return $2,384,042, from which he has taken expenses and taxes as stated of $1,677,480, which gives us a net return, which would give us 6% of valuation, amounting to $706,562.00.

Q. That is the amount you would have to have plus operating, outside of it, to make six per cent return?

A. That is the amount of return that would be necessary to produce six per cent on valuation. We have shown an additional revenue of $948,982 which is obtained by taking our earning and adding our per cent of revenue.

Q. What is the next page, sheet 6?

[fol. 730] A. That purports to show rates which would be compensatory on the basis of statements previously submitted; I want to say that statement itself as revised does not show single car rates in thousand feet, which should show.

Q. That is, the rates necessary to make a compensatory return?

A. Yes, sir.

Q. You have figured that as of single car rates?

A. Yes, sir, and took 8,000 feet as average load of car.

Q. The first column shows the present rates, including 25% advance. Are these the advanced rates?

A. Yes, sir, single car rates.

Q. The second column shows what the rate would have to be to earn the required revenue on the entire traffic?

A. Those rates if applied against the 1920 business would produce a revenue of $2,982,809.00; and similar rates in column shown excluding Puget Sound Terminals would show $2,384,042 as stated.

Q. In other words the amount needed to produce six per cent on the entire property is $2,982,809.00?

A. That is the amount of revenue necessary.

Q. And the rates nedeed to produce such revenue are shown on sheet six, middle column?

A. The second column, yes, sir.

Q. The amount needed to produce six per cent, excluding terminals, is $2,384,042.00?

A. Yes, sir.

Q. The rate which would produce that amount of money is shown in right hand column of page 6?

A. Yes, sir.

Q. The present distance rate for 30 miles is $2.34½, is it not?

A. Thirty miles?

[fol. 731] Q. Yes, sir.

A. Would not that take the lower rate, $2.27?

Q. Present distance rate for 30-35 miles is $2.34½?

A. Yes, sir.

Q. The rate necessary to produce six per cent on value of entire property would be $3.72, including terminals?

A. Yes, sir.

Q. The rate needed to produce 6% on value of property, excluding terminals, $2.97?

A. Yes, sir.

Q. That is upon the assumption that business moved, operating distances, labor costs, and all other items remain the same as they were in 1920?

A. No; assuming operating costs were on the same basis as in 1920.

Q. That is, have you made allowance for increase of 25%?

A. Based on identical movement of 1920?

Q. Those are the rates needed to produce this amount of money under the rate decisions if the business was the same as for 1920?

A. Yes, sir.

By Supervisor Cleland: It is also based on the assumption that all other prices except trainmen's wages will remain the same as in 1920?

A. That prices themselves will remain the same?

By Supervisor Cleland: Yes, except trainmen's wages?

A. Yes, sir, on that theory. The point is we have taken 1920 labor conditions and equated them on a basis of pay of July 1, 1921, and therefore these rates would produce an equivalent to August 1, 1920, but based on the traffic of 1920.

[fol. 732] Q. You have had exhibits showing that in 1921 the traffic is very much less than for 1920?

A. Yes, sir.

Q. Therefore, if the showing made by business handled in 0921 were taken as a basis this compensatory rate scale would have had to be substantially higher.

A. In order to produce the same result, yes, sir.

By Supervisor Cleland: Based on how many months?

By Mr. Da Ponte: Based on six months. This exhibit 45 shows point to poont movement for these siw months.

A. Revenue is shown also on a separate statement, revenue received.

Q. Exhibit 43 shows revenue for seven months ended July 31, 1921, $540,887 is compared with revenue for that same period of 1920, of $940,074; that is allocated and brought to present basis.

By Supervisor Cleland: Do I understand that your business in 1920 is movement of traffic only, that your figures are arrived at by showing volume of traffic for 1920 and applying it to operating expenses and operating revenues as of July, 1921, or are you employing operating expenses with the exception of trainmen's wages as of 1920?

A. We are applying all operating expenses as far as wages are concerned on the present basis of July, 1921, to increase profits.

By Supervisor Cleland: What are your variations for.

A. There are other reductions we may have to figure on.

Q. Are you figuring on other prices as of 1920?

A. No change except for the wage situation.

Q. Are you using 1920 operating expenses except trainmen's wages?

A. Except on all wages; made no variation on that.

[fol. 733] Q. Where in this statement is any allowance made for depreciation, if any, or what is the carriers' rule with reference to allowance for depreciation?

A. In the matter of depreciation we take the stand that as long as the road has not been undermaintained, there is virtually no depreciation.

Q. Does the Interstate Commerce Commission in its classification carry any items for depreciation?

A. It has an item for depreciation, but it is optional to charge it to depreciation.

Q. The carriers are not charging that to depreciation, but are including that under maintenance?

A. Yes, sir.

Q. Which, in your statement, is shown under operating expenses?

A. Operating costs, yes, sir.

By Mr. Clifford: Is it not a fact that there are interstate commerce classification accounts, of which depreciation accounts can be found in your classification? I refer to car bodies, and tracks?

A. Depreciation is all shown in operating expenses, or maintenance of structures, or may be under charge for depreciation.

By Mr. Clifford: It is all shown there in Maintenance account?

A. Oh, yes, sir; those figures include that. It is the carrier's stand that unless the road has been undermaintained there is vir-ually no depreciation.

Q. That was covered by Mr. Bryan?

A. I think so.

[fol. 734] Q. He testified these accounts from which he took this balance were made up from Interstate Commerce instructions and according to their classification, and their devision of expenses, so I take it that the accounts, as to how the account should be made, or charged, is not an open one, since it has been settled.

By Supervisor Cleland: The reason I ask is that in our valuation and rate cases concerning utilities, the depreciation is considered separately from operating expenses; it is a separate item deducted from the gross revenue.

By Mr. Da Ponte: Evidently controversy had raged around that subject, but it was found these things all became matters of history after Congress passed the valuation act, and the Interstate Commerce Commission, to satisfy themselves, directed exactly how these charges should be made to expenses, and allocated and divided.

By Supervisor Cleland: We just wanted to know if it was in there or not.

By Mr. Da Ponte: We do not want to question the methon in which it was made up; it was done by the Commission and all ready for use.

Cross-examination.

By Mr. Henderson:

Q. In making up a tariff, to be a compensatory tariff, or rate, you follow the same procedure as if making up a silk tariff?

A. This tariff was made up in this way; the same rate increase has been allowed for all single car rates.

Q. If you are going to build up a tariff on any particular kind of traffic, silk, logs, acids or anything else, you would use this same basis?

A. Oh, no, I simply took the tariff as it stood and made proper adjustments on percentage-bases.

Q. But you would take traffic, the amount assignable on a car [fol. 735] mile basis, and gross ton mile basis, the value of the land and equipment, give it its proper discount for that value to get a return on that, and maintenance of way, all assigned on the same basis, as you would if it was for silk?

A. Yes, sir, as far as that goes, yes, sir.

Q. In making up this tariff you recognize no classification of different kinds of commodotieies?

A. No, sir.

Q. Turning to page 4 where you make an assignment to freight based on the proportion of operating expenses; that is a valuation assigned to freight as distinct from passenger?

A. Yes, sir.

Q. That is made on a proportion of operating expenses?

A. Yes, sir.

Q. You make this assignment of values on another basis, to meet loaded car mile basis?

A. No, that is included in that same figure.

Q. When you break it down to log shipments, you break it down on a basis of loaded car miles?

A. We put it on the same basis; $130,000.00 takes the same basis. $97,000,000.00 is for freight, in proportion to the amount shown. 15.34%, or $15,963,000 as freight proportion.

Q. You get the proportion on the amount assignable to freight on the basis of operating expenses, didn't you?

A. Yes, sir.

Q. You get your proportion assignable to logs on the basis of car miles?

A. Yes, sir.

Q. Why don't you use the same basis between freight and passenger?

[fol. 736] A. If I did that on the car mile basis, it would be open to serious argument.

Q. Which way is right?

A. This way is correct. You take the car mile basis and you assign to freight operation—it has no bearing.

Q. You did assign the valuation to log traffic on the car mile basis?

A. You are dealing with two distinct entries. Freight and passenger car miles are not co-related.

Q. You assign that on a gross ton mile basis?

A. Figures like you have used would be more nearly determined by gross ton miles than car mile basis; we wanted to be as fair as possible.

Q. Would it not have made a difference if you assigned land values on the gross ton mile basis?

A. Yes, sir.

Q. You would not have had as large an assignment of valuation?

A. Percentage shows that 11.71 is assigned of the locomotives and cabooses to log service.

Q. If you had used land values you would have said four per cent?

A. We did not consider gross ton miles as a proper basis to assign the amount of that value to logging traffic.

Q. How did you assign the value of the land?

A. Here is the idea. Your gross ton miles, as I said before, well, they represent the tare weight of the empty cars, and are not nearly so conclusive as the car mile basis. I admit that it may be more favorable to show that, but we look at it that the car mile basis is more fair.

Q. You did not use that on equipment?

A. In the case of locomotives the gross ton mile was no indica-

[fol. 737] tion.

Q. Why?

A. A locomotive for instance may be hauling say ten cars or twenty cars, and you would get no variation.

Q. You get car miles?

A. That is very true.

Cross-examination by Mr. Clifford:

Q. Do you think this showing in No. 47 is entirely fair as between the shippers and carriers in log traffic?

A. In what respect?

Q. Do you think in general it can be said it is a conservative showing as far as the carriers are concerned?

A. I think is is more than such, because in our showing, and particularly in this scale of rates, you must bear in mind we are eliminating all terminal expenses, as well as value of terminals; if anything, that is giving the shipper the benefit.

Q. You take into account in your proposed rate the fact that your traffic has decreased, or that you would earn upon a smaller volume of traffic, if traffic conditions continue.

A. I did produce some figures for six months of 1921.

Q. In other words the schedule of proposed rates shown on page 6 of Exhibit 47 would have to be higher if the volume of traffic is not increased?

A. The rates shown there would have to be higher if the volume of business was not as high as in 1920.

Q. Also have you taken into account past losses? You know it is quite usual and ordinary to capitalize past losses; that has been allowed sometimes.

A. I think that 1920 is as good as we have had for some time in traffic conditions.

[fol. 738] Q. That would be found a compensatory rate, would it not?

A. What time do you refer to?

Q. You have not made a fair return in 1919 for instance, the year preceding the year for which you made the estimate?

A. I did not think it was fair to discuss that year, and it would be better to take a year prior to Federal control.

Q. Here is another item: The ordinary effect of an increase in rates is to reduce the volume?

A. I would not say that.

Q. Is not that the ordinary effect?

A. I think that is a traffic problem.

Q. Would you not have to keep the volume to get a truly compensatory rate on that basis?

A. I think that is a traffic matter.

Q. Give us your opinion?

A. There is a certain business moving, of course, and is going to move if the rates are fair.

Q. Regardless of the rate?

A. I would not say regardless: if it were fairly established.

Q. Do you consided that a high rate or medium?

A. I consider it a very fair rate, for the reason we are leaving out terminal cost and values, and as you know, the statement is quite well shown on this page 4, where we have a difference of nearly three hundred thousand dollars not getting returns, including the terminals.

Q. This is supposed to be a compensatory rate; would it be truly compensatory unless it took into consideration percentage of cost?

By Mr. da Ponte: That is a question of law. I object. The Interstate Commerce Commission has fixed on that and we have no [fol. 739] time to criticize it; they are acting pursuant to law. He is taking a very unfavorable basis to make a valuation on. We know prices will never get back to 1914.

By Mr. Clifford: The exhibit is introduced as a compensatory rate and the questions I am asking are to develop what is meant by a compensatory rate?

By Mr. Da Ponte: Ask if he could.

Q. You have designated this as a compensatory rate, and the cost of reproduction upon which it is formulated is based on costs on pre-war prices. To be truly compensatory would it not have to be based on costs of present day prices?

A. To be truly so, yes, sir, but if it were, the rates would be still higher.

Q. The dollar does not buy as much today as it did before the war, and many authorities contend that the dollar is worth fifty cents where it was relatively worth full value before the war. Would you not have to introduce an additional factor if you get a mutually compensatory rate to take care of the dollar?

A. The Commission has outlined a plan of reproduction cost based on 1914 prices. It is very true as you say that those prices probably never will be reached. That does enter, that proposition, but we are bound by the rules of the Commission as to what is six per cent. If they say that a certain expense shall be figured at 5½% based on valuation, and if the Commission says a value is so and so, I can not question their judgment.

Q. I am following your exhibit, which calls for a compensatory rate. Would it not take into consideration the depreciated value of the dollar?

A. I do not think I could answer it just that way; the rules varied to this extent. The Commission has stated what figures are to be [fol. 740] used for a basis. Reproduction costs are shown on 1914 basis, and returns are to be based on this item.

Q. You would not say excepting you are trying to determine a rate which would be what the Interstate Commerce Commission would allow you? This is the basis of the compensatory return? I now ask whether you do not have to take into account the depreciated value of the dollar?

A. I would rather not, because they are built up on that one figure, and it is a pretty broad subject to determine for good.

Q. Taking into account all these considerations, and all others that might be mentioned, would not that rate you show on page 6 of No. 47 have to be considerably higher than what you have shown to be truly compensatory?

A. Provided you use the present prices of reproduction—yes, sir.

Q. Is it not a further fact that truly compensatory rate would

be an impossible rate based up on present rate basis, so far as present traffic conditions are concerned?

Objected to by Mr. da Ponte.

By Mr. Balmer: This is not cross examination.

Objection overruled.

A. No, sir.
Q. No, what?
A. No, to your general question. It is a traffic matter.
Q. You have no knowledge of that, then?
A. That is my answer, yes.

[fol. 741] By Mr. Clifford: I will ask that later on Mr. Da Ponte produce a witness that can answer traffic questions, that it will be proper to question on Exhibit 47.

By Mr. Balmer: On whose behalf do you make that demand?

By Mr. Da Ponte: It is very important that the attorney general do not take sides in the handling of this case, and it is an extraordinary thing that he should take sides in the case.

By Mr. Henderson: The Attorney General or anybody else is entitled to ask a question without being criticized for asking it. You are criticizing the attorney general for questioning.

By Mr. Dudley: I understand his position is, this is a compensatory rate. Under the law he may be right. I am inclined to think we may agree with him. Let us assume that he will take the same position throughout.

By the Director: Are you accusing the attorney general of siding in with the railroads?

By Mr. Da Ponte: I am thanking him for it, not accusing him.

By Mr. Carey: You have built up this theoretical scale theory?

A. Absolutely.

Q. You have given no consideration at all to the operative effect on the basis of this scale?

A. None at all.

Q. As far as you know, the same volume of traffic might move or no traffic at all?

A. That is the assumption.

Q. As I understand it, in computing this scale of rates, you used the volume of traffic that moved in 1920?

A. 1920, yes, sir.

Q. Prior to August, 1920, August 26, traffic was moving under a different scale, actual rate was $1.25. Substantial commodity rates [fol. 742] under which commodities actually moved was lower than the distance scale?

By Mr. Da Ponte: You are correct, but that is a traffic matter.

A. That is my understanding.

Q. Why did you use the volume of traffic in 1920 rather than 1921?

A. 1921 is rather an abnormal year so far as commodity rates have to be made for is to go.

Q. The fact is that on August 26, 1920, the scale of rates, distance rates, was increased 25%, which resulted in an actual rate of $1.56½ instead of $1.25?

A. Yes, sir.

Q. Contemporaneously with the increase in rates, traffic started to fall off?

A. That is the general assumption, but I do not think the two are co-related.

Q. The fact is these two things happened in this case?

A. Yes, sir, but to me are not analogous.

Q. So far as you know, to impose a still higher rate on the traffic will result in traffic falling off more seriously?

A. It is possible, yes, sir.

By Mr. Henderson: Do you want the record to stand that you thought 1920 was more of a normal year than 1921?

A. No, it was normal in some ways because costs were higher in 1920.

Q. I mean with reference to volume of traffic?

A. It was a banner year all throughout.

Q. You would not undertake then to say it was a normal year for the purpose of paying this rate?

A. Yes, sir.

Q. Your exhibit shows the movement in 1921 is very comparable to movement in 1917.

[fol. 743] A. 1917?

Q. Yes, sir, and that the abnormal movement was in 1920.

A. The exhibit of movement in tons shows 138 per cent over 1917. It was exceptional all the way through.

Q. Exhibit 1920 was almost the same as movement in 1917?

A. Six months of 1921—you have about one-half of 1917.

Q. You did take the highest year in log movement for the purpose of arriving at a compensatory figure?

A. We want to make it a 1920 comparison as far as possible.

Q. I am talking about the volume of traffic you applied the rates to. You took the largest volume of traffic you had in any one year, in order to make an estimate of this compensatory rate?

A. That was not the idea I had in mind. We figured 1920 was a fairly good year for that purpose.

Q. You did not expect that kind of year again, did you?

A. 1921 is an exceptional year, and 1920 was fairly representative of logging traffic.

By Mr. Carey: Do you know whether the actual revenue collected by the Northern Pacific was greater under the $1.56½ scale than under $1.25?

A. We can tell from our exhibit we have submitted. We have the revenue by periods, divided up into sections. The division of the two periods, January to August,—and we have here September to November, and we have December, 1910; that shows December on, through the following eight months. Supposing we take this, De-

cember, and add to that figure. Taking the revenue on the two different figures, January to August, revenue of Washington intrastate log traffic in the State of Washington, was $862,340. Now September to December, under rates effective on August 26, 1920, [fol. 744] amount to $446,535, which are practically a little more than half of the previous eight months, thereby indicating no falling off to any great extent.

Q. That would give you the entire traffic for the year 1920?

A. Yes, sir.

Q. Have you got this figure for the year 1921 up to now?

A. It is footed on the statement I submitted this morning, for seven months, and that is as far as we have the figures available.

Q. That is Exhibit 43, I think.

By Mr. Da Ponte: These figures, the criticism is apparently intended to 1920, and if that is the item to be used, it decidedly favors the shippers, does it not?

A. Yes, sir, because the cost was lower if business was abnormal, because of the very great volume of traffic of that year.

By Supervisor Cleland: On page 6 of this exhibit you have three columns of rates.

A. Yes, sir.

Q. The second column includes the Puget Sound Terminals?

A. Yes, sir.

Q. The third column excludes Puget Sound Terminals?

A. Yes, sir.

Q. Which one of them do you recommend to the Department to adopt?

A. That is up to the attorney, I think.

By Mr. Da Ponte: Perhaps the traffic people would be the ones to recommend that. That is not perhaps a fair question to this witness. As a matter of law we are submitting the carrier is entitled to a certain rate.

By Supervisor Cleland: Which one do you contend for?

[fol. 745] By Mr. Da Ponte: I will say this, that I think the idea in separating the terminals was this, that we realize we would be subject to criticism and cross-examination with regard to the extent to which log traffic should be charged with the use of terminals; it will be argued these terminals are for through business and only to a minor extent used for log traffic, and therefore it is unfair to burden the log traffic with an equal charge for the upkeep of these terminals, so we separated that. I think beyond any question Mr. Henderson and Mr. Carey will concede that the log traffic should be charged with some percentage of the cost of operating terminals, and with some percentage of the value of property devoted to that purpose; we have used fifteen per cent on the theory that the number of cars using the terminals was fifteen per cent of the total number. There may be objection to that, but that we are entitled to some percentage is clearly incontrovertible.

By Mr. Henderson: We are paying you a fifty cent terminal charge now.

By Mr. Da Ponte: That is a matter in the Commission's discretion as to how far you will allow anything for the use of the terminals.

By the Director: Your contention was that we should take into consideration fifteen per cent of the terminal charges?

By Mr. Da Ponte: Yes, sir; we have submitted that particular witness to prove that is a fair basis on the basis of the use actually made. They have their experts and we will be very glad to hear from them if they criticize that.

By the Director: That would increase the rates shown in the third column, and decrease those shown in——

By Mr. Da Ponte: It would not affect those shown in the first column. I mean the second column. The rates based on compensa-
[fol. 746] tory return including the Puget Sound Terminal is the rate needed to charge the log traffic with 15% of upkeep and 15% of these *these* terminals. The last column excludes the terminals entirely.

By the Director: The log traffic annually shares about fifteen per cent in the cost of main line and Puget Sound Divisions?

By Mr. Da Ponte: The last column shows the rate absolutely. We will be glad to have any suggestions from the experts which the loggers produce.

By Mr. Henderson: We would like to know what particular rate the carriers are advocating, so that we may agree or disagree with their contentions. We would like to know if this is the rate the carriers want.

By Mr. Da Ponte: I am advocating the rate the carriers are entitled to as a matter of law.

By the Director: You submit then it is a matter of law, and that all rates in the second column are the correct rates?

By Mr. Da Ponte: I think since we are entitled to something for the terminals, 15% is the only figure up to date that has been suggested and this Commission in passing upon this is bound absolutely as I see it by the theories of law which the courts have deduced from the constitution of the State and of the United States. In other words, this Commission has no discretion to prescribe a rate which is a lower rate than that which the Constitution guarantees

By Mr. Czrey: You are asking for increased rates.

By Mr. Da Ponte: I inquired what the purpose of the hearing was and it was stated, to investigate these rates, and prescribe a reasonable rate; that was the scope of the inquiry.

By Mr. Balmer: The statement that Mr. Da Ponte has just made
[fol. 747] in colloquy between the Commission, Mr. Henderson and Mr. Carey, is made in behalf of the Northern Pacific, and was not intended to be made, I assume, in behalf of any of the other carriers.

By Mr. Da Ponte: I am giving my view of what we are here for.

By Mr. Balmer: As for the Great Northern, we prefer, when the time comes, to make our own statement rather than to admit in all respects the statement which Mr. Da Ponte has just made.

By Mr. Dudley: We reserve the same privilege.

By Mr. Clifford: I presume that is true also of the other carriers.

By Mr. Carey (to the witness): I will ask you, what your figures show as to actual carrying log revenue of 1920 when the $1.25 scale was in effect—you said it was $752,000.00?

A. Yes, sir.

Q. I think you will find it averaged $107,000 per month?

A. Yes, sir.

Q. I find on your exhibit 20, page 43, you give the revenue from log traffic for seven months ending July 31, 1920, as $752,000?

A. That is correct.

Q. I think you will find that is over $107,500 a month?

A. Yes, sir.

Q. In comparison with these two figures, the actual money received by the railway company with the higher scale of $1.56½ in effect was not any more than the revenue received with theo lower scale in effect, during the year 1920?

Objected to by Mr. Dudley as immaterial.

By Mr. Dudley: We may not have received any more money, but we perhaps went to bed more tired, and worked harder.

By Mr. Henderson: You never worked over eight hours.

By Mr. Dudley: We may go to bed hungry, but we do not want to go to bed hungry and tired too.

[fol. 748] A. During the year 1920 the actual revenue was $1,308,000; gotten by adding $862,000 first half, and $446,000 in the last four months.

Q. That includes revenue for the whole year 1920 under increased rates?

A. Yes, sir.

Q. I was taking only revenue up to August, where that traffic was moving under the $1.25 scale.

A. Yes, sir.

By the Director: What is the argument on that proposition?

By Mr. Carey: I am just bringing out the fact that under the $1.56½ scale in effect 1920 you do not collect any more dollars than you collected during the prior year when the $1.25 scale was in force.

A. The slump in business came in the latter part of 1920. In December you had a revenue of $69,000, and had about $377,000 for previous three months. You only got sixty-nine thousand dollars in December. That may be explained partly in that reason: if this business slump had not started in, we would have had a much better showing.

Q. After these increased rates had been in effect about three months traffic started to fall off?

A. I am not quite sure that is the reason.

By Mr. Da Ponte: These figures Mr. Carey is talking about are gross figures?

A. Yes, sir.

Q. It don't indicate you made any less money under higher rates?
A. No.

By Mr. Balmer: Mr. Henderson asked you some questions indicating that 1921 was an abnormal year, due to abnormal business under that year. You have introduced some figures indicating that [fol. 749] the present year is more comparable to years prior to 1920 in the matter of volume?

A. Yes, sir.

Q. With the volume of business more nearly normal as compared with years prior to 1920 your figures show carriers have used practically the same amount of revenue in dollars as in the corresponding period for 1920 when the volume of business was higher

A. Take a seven months' statement. We show $543,000 for seven months at present revenue; comparing that with the present year, $940,000, we are of course a great deal below in the matter of seven months, of course. I do not think that 1920 was an unfair year. If business was exceptional it would also reflect itself in lower costs.

By Mr. Dudley: On page 2 you showed that the proportion of revenue required was 93.56%.

A. Additional revenue.

Q. Yes, sir, that is based on——

A. No, you have got there a certain amount of revenue in 1920 equated to a full year on the same basis, $1,541,060. In order to produce six per cent on return, we will require $1,441,749 additional.

Q. In the last page, where you show a proposed increase of compensatory rates, taking the rates necessary to make a compensatory return, including the Puget Sound terminals, you increase the mileage rate about 57%?

A. That is due to this reason, you cannot take and increase your revenue received in 1920, based on substantial commodity rates you cannot increase this by 95%; that would not be proper, because they were moving at a low rate in single car rates. The movement was [fol. 750] not on single car rate as shown, but on special and train load rates.

Q. How do you arrive at the factor of your increase?

A. Fifty eight per cent?

Q. Yes, sir.

A. It was worked out on a certain amount of revenue needed to produce a return and it was applied on a distance scale on the same plan as used in rates of August 26, 1920. In other words, at increased present rates, 58% would give us rates of compensatory return.

Q. You had to increase a certain amount and divided that increase and allocated a different scale basis?

A. Yes, sir. We found 95% was entirely too high, so we had to reduce that percentage and bring it within that figure contemplated, for additional return. We had to scale down that percentage, and get $1,441,000, including terminals, or $842,000 leaving out terminals.

Q. Did you arrive at that by taking the amount you would have

received on the existing scale from the different log movements, and figured it out in that way?

A. We took it first of all, established the actual revenues equated to 1920 basis, and then we determined what additional revenue was required, $842,000 excluding terminals, and then worked out a sliding scale on basis of percentage increase of these service costs, to produce the increased rates.

By the Director: Are all these rates increased the same percentage, 58%?

A. Yes, sir, all increased the same extent.

By Mr. Henderson: The volume of log traffic in 1920 as compared to the volume of other traffic was abnormal, was it not, as a matter of percentage?

[fol. 751] A. I could not say that without getting all the figures on it.

Q. Your figures show volume of log traffic was 138% of what it was in 1917?

A. I can get very readily the increase—in the other——

Q. If it is true that the percentage of log traffic to other traffic in 1920 was larger than a normal year, that will increase the amount of value which you assigned to the log traffic?

A. That being the case, but I do not think it is.

Q. With reference to this proposed compensatory rate for page 6 of this exhibit—take the rate from 25 to 30 miles, your average rate is $1.64; or take the rate 30 to 35 miles, it is $2.16 and you have gotten that up somewhat; how do you arrive at your proper steps between the rates as you go along?

A. I used the same percentage 58.756% in every case.

Q. You just increased your present distance rate 58%.

A. Yes, sir, 58%.

By Mr. Da Ponte: You stated the average haul was 146 miles?

A. The average haul was 146 miles, as formerly reported in the annual report for the year 1920; the exact figure was 142.24 on miles hauled of revenue freight; 147.71 for all freight.

Q. What was the average miles of carload freight?

A. I cannot determine for the State of Washington from this report, but we have a report from January to August, and September to November, which shows that the average haul of carload freight other than logs was 99.2 miles for those eight months of the year, and 101.8 for the months of September and November, as compared with log traffic, 32, for the three months of September and November.

By Mr. Da Ponte: I have an exhibit which shows on the face of it just how the value of the equipment in the logging service is made up. It is agreed by Mr. Henderson that we will offer this exhibit [fol. 752] N. P. No. 48, which shows on the Seattle and Tacoma Divisions the original cost of the engines, reproduction cost, reproduction cost less depreciation, and other items. It shows the value of the cars and equipment the same way, reproduction cost less depreciation.

By Mr. Henderson: It being understood that the reproduction cost is of present day prices.

By Mr. Da Ponte: It shows the average number of cars in service and gives in fact all the information Mr. Pederson used in fixing his value of the equipments.

By Supervisor Cleland: When you refer to present day prices, what do you mean?

A. Cost of purchasing them at present, at the present time.

Q. That is not the value of 1920, but present value?

A. It shows all three values.

By the Director: Did you base that on 1920 prices or on pre-war prices, or the present day prices?

By Mr. Da Ponte: Reproduction cost is present day prices, 1921. The first column is original cost and this last column is the reproduction cost, that is value at the present time, less depreciation in equipment, according to rules adopted to figure depreciation.

By Mr. Carey: That is, reproduction cost new?

By Mr. Da Ponte: If the present cost of a car is $1,200 that is the reproduction cost. I want to offer in the record a printed copy of the classification of operating revenues and expenses, prescribed by the Interstate Commerce Commission, in connection with the Accountant's testimony.

Admitted in evidence and marked N. P. Exhibit 49.

[fol. 753] O. O. CALDERHEAD, being first duly sworn, testified as follows:

Examined by L. B. Da Ponte:

Q. You are the Traffic Expert of the Department of Public Works?

A. Yes sir.

Q. I want to show you a statement which I will have marked N. P. Ex. 50, and I will ask you to explain it.

A. This exhibit is a statement covering gross receipts and expenses, taxes, net income, valuation by the State Board of Equalization and the earnings of the Northern Pacific Railway for the years 1906 to 1920, inclusive. The figures in the first four columns are taken from the annual reports of the Northern Pacific Railway filed with the Public Service Commission, the Railroad Commission and the Department of Public Works.

Q. The statement under the heading "Valuation by State Board, do you recall where that was obtained?

A. The valuation up to 1916 was furnished by the Public Service Commission to the Tax Board.

Q. For instance that figure for 1916 of $126,544,615, which was used by the State Board of Equalization is the valuation furnished by that Board by the Public Service Commission of this state?

A. Yes sir.

Q. That valuation is the one determined by the railroad Commission in 1908 supplemented by further findings of 1911.

A. Supplemented by additions of permanent improvements.

Q. Which they found have been made?

A. During each year.

[fol. 754] Q. As a matter of fact this valuation of $126,000,000 is the same value determined by the Public Service Commission in 1911 and used every year since by the State Board?

A. In 1911 and 1912.

Q. Isn't that so?

A. Yes sir, so far as I know.

Q. The tax authorities in the State have not added for taxation anything to the valuation of the railroad property since 1912?

A. That is my understanding; the annual report of the Board shows that, and it shows on the face of this exhibit.

Q. That figure is the one found to be the value by the Railroad Commission?

A. The 1911 and 1912 valuation is the one furnished to the Tax Board by the Public Service Commission as the value of railroads, plus additions and improvements since 1908.

Q. Which they found pursuant to the Public Service law directing them to do so?

A. Yes sir.

Q. As a matter of fact is *is* necessary that there has been added increase, by additions to valuation of the property since that time?

A. I assume there has been.

Q. The Point Defiance line has been completed since?

A. I am not so certain but what the Point Defiance line is in additions and betterments since 1912.

Q. Yes sir, but it is not reflected in this $126,000,000 figure?

A. That I do not know.

[fol. 755] Q. So that as a matter of fact the value if taken today would be far in excess of this $126,000,000 used?

A. I would believe that it would, yes sir.

Q. Referring to the figure showing net returns and earnings in the last column, that represents earnings made in each year beginning 1909, upon the valuation used by the State Board, for taxing all property, does it not? Under the column headed Per cent of Earnings, is shown earnings of the railway company and net receipts upon value of property as fixed by the State Commission?

A. After deducting taxes and pro-rating interest and earnings according to established rules of the Commission.

Q. In other words, that is the net return which the railways had for application to dividends and interest?

A. Yes sir.

Q. Until the year 1920 was reached, when there was a deficit, that is to say, there was a deficit after paying taxes of $2,600,000 on the value of the property as fixed by the State Tax Commission?

A. Yes sir.

Q. So the Northern Pacific that year did not earn anything, in fact lost money on the assessed valuation?

A. According to the method of pro-rating their earnings and operating expenses within the State of Washington.

Cross-examination.

By Mr. Henderson:

Q. The last exhibit is net earnings?

A. Yes sir.

Q. General Order 128 increasing the rate went into effect June 28, 1919?

[fol. 756] A. Yes sir.

Q. The cost jumped under ex parte No. 74, on August 26, 1920?

A. Yes sir.

Q. All of the earnings of the carrier prior to the first increase by General Order 28 were much greater than they have been since that time?

A. Yes sir.

Q. So that the figures which you use, show that since the first rate went into effect, the earnings dropped from $4.08 to $1.94 and since the second rates went into effect, they have dropped to $.86, a net loss of $2.06?

A. Yes sir.

Q. With reference to the earnings, is it or not a fact that the guaranteed earnings assured by the Government will be made up to the railroads as of September 1st, 1920 for the loss suffered during Federal control?

A. Why, the guaranty to the Northern Pacific Ry. was to the Northern Pacific Railway as an entire system, and the fact that they may have lost and may not have earned the guaranty in this State is not an indication that as a total they did not earn their total guaranty. The gross receipts and operating expenses in this State may not reflect the true net operating income of the company. That is due to the fact that the earnings, the gross receipts, within this State, are earnings from State traffic, and mileage pro rata of Interstate traffic. The mileage of branch lines which feed the main line of the Northern Pacific Ry. are much greater in this State than in other states, and operating expenses on Branch lines are higher than [fol. 757] they are on the main line. The net result of it is that the expenses being allocated where they occur, that is, within the State of Washington, where expenses are heavy, they are charged here, but earnings are pro-rated on a mileage basis. Expenses are not pro-rated in the same manner, so that the traffic which shows an operating loss in 1920 in the State of Washington might have been very profitable traffic to the railroads as a whole.

By Mr. Da Ponte:

Q. Comparing the Northern Pacific net showing in this State with that of the Great Norther-, O.-W. and the Milwaukee, state which has been the move favorable during the last decade.

A. Well, the Northern Pacific has shown a greater net return in this State I believe, than any of the other large roads.

Q. So that the inference would be as far as the State road is con-

cerned, the Northern Pacific would earn a reasonable return on the lower scale than the other roads?

A. Well, if they put in a lower scale of rates the probabilities are the other roads would reduce, and they would not earn a great deal.

Q. I was making comparison in the scale of State rates.

A. It naturally follows, Mr. Da Ponte, that if there are any greater amounts, they could stand a greater reduction.

Q. Could earn a return at a lesser rate than the other roads?

A. Yes sir.

Q. That is true up to the present time?

A. I imagine that is true. The Northern Pacific runs through productive territory and is an older line.

Q. Greater density of traffic?

[fol. 758] A. Yes sir.

Q. That is the reason why it has made a better showing in this State?

A. It is practically the pioneer line in the lumber traffic, which is the principal commodity handled.

By Mr. Dudley: This exhibit does not show that gross revenue fell off after the increase in rates in 1920?

A. The gross receipts within the state?

Q. Yes sir.

A. No, the gross receipts are practically steadily increasing.

Q. In 1920 after this raise in rates to which Mr. Henderson referred to day, the gross receipts jumped up to 29, over 25 for the year 1919?

A. Practically four million dollars.

Q. The deficit shown in the last column is the result of increase of expenses, and not from falling off of business?

A. Increase of expenses and taxes.

Q. You are referring to all traffic?

A. The exhibit speaks for itself. The figures are accurate as far as the reports show.

By Mr. Balmer: As I understand the history of the valuation of the railroads in this state, there was, about in 1908, a valuation determined by the State Railroad Commission for the Northern Pacific and the Great Northern and other Companies in the state?

A. Yes sir, for all steam carriers.

Q. Is that valuation as then found, as to the Great Northern, ever supplemented by additional figures?

A. Yes sir.

Q. In what year?

A. For the years up to about 1916 as I recall it.

[fol. 759] By Mr. Da Ponte: Supplemental figures dated August 27, 1911, included betterments between the date 1909 up to that date as I thought?

A. I want to make this explanation. The Commission fixed the values in 1908, and then required the carriers to supplement the valuation by reports each year of permanent improvements and betterments, giving the location and kind of improvements which

they wanted added to their valuation, permitting the Commission's engineers to verify their reports put in, in the general offices. It is my understanding reports came in to about 1915 and 1916.

By Mr. Balmer: The law provided, did it not, at the time the valuation was originally made, that the valuation as determined by the Railroad Commission should be obligatory upon the State Tax Commission for state taxation purposes.

A. At the time, in 1908, I believe that was true, but I think the law was amended in 1909 or 1911.

By Mr. Da Ponte: Later, in 1913.

Witness, continuing: Or some time along there. But the provision of law requiring the Commission to keep the valuation up to date was never repealed, so that the law stands today that the carriers are obliged to supply this valuation by annual statements showing the permanent improvements and betterments for the preceding year.

Q. Was it the Railroad Commission or its successor the Public Service Commission, or was it the State Tax Commission that determined the value of the various railroads in the State per mile of line—was that done by Public Service Commission or the Tax Comsion?

A. The tax Commission.

Q. They gave to the main line a certain v*la*uation per mile of line. [fol. 760] To main line a certain valuation, and sidings a certain valuation?

A. That was done by the Tax Commission.

Q. That was a division of the general valuation figure that had been originally determined?

A. Yes, sir.

Q. I have here the minutes and official proceedings of the State Equalization Committee for June, 1921, in which I notice beginning with page 32 a valuation assigned to all main track of the Great Northern of $88,432.85; that is actual valuation, and a valuation for sidings of $17,686.57; and of secondary main track of $26,529.85. Can you state whether or not these figures showing the apportionment of the per mile of line for valuation of the Great Northern Railway in this State of the general valuation that was originally found by the Public Service Commission supplemented since it was made.

A. No, I could not say as it was. I imagine that I could check that up and ascertain whether that is a fact or not.

Q. I wish you would be good enough to do that. Some of the history of that valuation matter is a little obscure and I would like to get it clear for the purpose of this and other cases.

A. I would be glad to do so.

By Mr. Da Ponte: The railroads continued to file this betterments and improvements?

A. So far as I know.

Q. The Commission never did find any figures of valuation?

A. It no longer controls the tax commission so it is not necessary to certify.

Q. It is not necessary to continue because the law of 1913 repealed the obligatory findings of value?

[fol. 761] A. That is the reason.

By Mr. Dudley: I understood you to say the Railroad Commission valued all steam railroads. Is it not a fact the Milwaukee was not valued by the Railroad Commission?

A. It was not constructed at that time.

Q. It is not valued?

A. It has never been valued by the Public Service Commission.

By Mr. Henderson: Referring to Exhibit 50. Mr. Dudley brought out the proposition that gross revenues increased after the increase in rates. Referring to that I will ask you whether or not it is a fact that the gross revenue increase- prior to the raise by approximately the same percentage they were increased to after the raise; for instance 1916-1917 gross revenue increase was approximately one million dollars, which would be one-sixth of the gross revenue. 1919-1920 have increase of approximately four million dollars, which would be approximately one-sixth of the whole revenue. Gross revenue was maintained before rates were——

A. Exhibit shows the amount of gross receipts for each year, and the percentages are easily figures. The most profitable year apparently was the year 1908, from the net revenue standpoint, 1908-1909. The increase granted for 1918 was 25% with some exceptions, and the increase in 1920 was straight 25%, but it did not increase the gross revenue 25%.

By Supervisor Cleland: All of the railroads except the Milwaukee have been valued by the Commission and have contin-ed to file up to date statements annually showing net additions and betterments so that we could take the valuation as originally found and add to it all net additions and betterments, and obtain the valuation of all roads except the Milwaukee within the State?

A. Yes sir, what is now the Bellingham and Northern, a division [fol.762] of the Milwaukee road, and the National Park line in 1908 were independent lines, and the valuations of those lines were established by the Commission, and that portion of the Milwaukee could be ascertained.

By Mr. Da Ponte: Those were in the annual reports?

A. Not necessarily. There is a report filed with the Commission showing actual location and the nature of the betterments and improvements, the theory being that the Commission could reject or accept it as a proper addition to the property.

Q. Have you prepared any exhibit bringing these additions up to date?

A. No sir, we have not. The reports are on file and can be readily added to though.

Q. Have you seen a statement, or prepared any statement segrega-ing the logging roads or that portion of the road used in log operations from the reports filed with the Commission?

A. No, no segregations of that kind have been made. As I understand, you mean use of the road by the logging industry.

Q. Yes sir, for adopting some basis upon which you would allow a certain portion of the general system as a rate basis for making logging rates.

A. There has been no study of that kind made since 1907 or 1908; at that time there was a segregation made of the traffic on the Northern Pac. and the Grt. Northern, showing the movement of various commodities, and segregation of cost of those commodities.

Q. Will you prepare for the record such a statement?

A. Yes sir. I can prepare a statement from such figures as we have.

By Mr. Da Ponte: You would have to have segregation of move-
[fol. 763] ment at the present time, if you have the 1908 finding?

A. I have at present statements filed by various carriers indicating the actual movement of logs for 1920 in this case, and the total operating expenses of the carriers divided between freight and passenger.

Q. In other words, figure- we have put in here?

A. Yes sir.

Q. Coming to that. You understood how Mr. Pederson apportioned the property to the value of the logging traffic?

A. Yes sir.

Q. Have you got the figures to compile that on a different basis?

A. I do not know that I would desire to compile it on a different basis.

Q. Do you think that is a fair basis?

A. I would be inclined to think that operating expenses assignable to freight would be probably a proper basis for divisions because it is different from revenue. It is at least more equitable than the revenue basis.

Q. That could not be used in the rate basis?

A. I do not know it, but if they did, they used rate judgment.

Q. You think to use the revenue basis is to beg the question? So you think this basis used by Mr. Pederson is fair?

A. I would be inclined to say so. I would not say there could be very much exception taken to the division made in operating costs.

Q. So it would be hardly worth your while to do that over again?

A. I would not say that. I would like to use the figures submitted
[fol. 764] by various carriers and reach my own conclusions.

Q. I wonder if it would produce the same results.

By Supervisor Cleland: I did not understand any of the carrier witnesses had based their figures upon that finding with betterments and improvements, but they had based it upon investigations made in connection with the Interstate Commerce Commission.

Q. My opinion is if we use the valuation by this Commission in 1908 findings, and add these betterments, you will get a larger value than the I. C. C. found. I would be curious to see exactly. I think you will have a larger value than the I. C. C. has found. Of course you have to remember that land values——

By the Witness: Without wishing to interrupt—if the two figures are easily determinable.

By Mr. Da Pontee: Of course, you must bear in mind this Commission valued railroad terminals, Seattle and Tacoma. You will find in findings 38, 39 and 42 that the Commission rejected as operating property large amounts of terminal lands in proximity of Seattle because it was not being used and the time in which it would be used they thought to be too remote, but I am informed that the Interstate Commerce Commission has determined that the time has now come to add this additional property in Seattle and Tacoma as operating. You see the property is gradually being absorbed into the yards and is being used in the teminals, that has now been classified as operating, which was rejected in 1908.

Witness: Has it been so classified by the State Tax Commission?

[fol. 765] By Mr. Da Ponte: I treat that question today as a matter of law. They attempted to re-classify that property; that was attempted in King County, and so they transferred to non-operating a lot of property which it has also classified as non-operating. I took that into court, and it was decided by the Supreme Court of this State that the State Tax Commission had no authority to interfere with classification. It was a pretty close question.

A. This is true, that the valuation of the property in Seattle and Tacoma terminals, as well as right of way property, that the then railroad commission or Public Service Commission used an additional factor for railroad use, which the division of valuation of the Interstate Commerce Commission does not allow, and consequently there will probably be found to be very little difference between the value found by this Commission and the value found by the Interstate Commerce Commission.

Q. If you take the valuation assigned by this Commission in 1908 on these terminals at the present value that the I. C. C. found on it, it is practically duplicate? This commission used a value over and above the market value, but this has been absorbed by the very great increase in value of the land in Lakeville. Portland, Seattle—so it happens to have turned out in that way there is a negligible difference between the values fixed by the Commission and of the I. C. C.?

(No answer.)

By Mr. Balmer: I do not quite understand your statement as to what you consider would be a fair way of assigning to the log traffic its proportion of the capital charges or return on the invest-

[fol. 766] ment. Would you divide that between freight and passenger on the same ratio as general operating expenses are divided between freight and passenger?

A. Your idea is that in fixing the value, in fixing the percentage of value of the property to log traffic, what basis I would use?

Q. Yes, sir.

A. I would be inclined to think that the gross ton mileage or the car mileage would probably be the best basis for determining the use of the property for logging traffic.

Q. You would not differentiate at all between freight and passenger?

A. Yes, sir, you must have your use divided between freight and passenger there; the operating expenses freight and passenger might be a fair method of dividing.

Q. That would be the first step in the classification?

A. Yes, sir.

Q. Then in apportioning the freight proportion of the freight expenses to the various commodities, you would use either the gross ton mile or the loaded car mile?

A. The empty or the empty car mile.

Q. Do you have any preference as to whether you use gross ton miles or car miles?

A. Ordinarily gross ton miles would probably come nearer than car miles.

By Mr. Da Ponte: That is the method Mr. Pederson applied.

A. I have not any quarrel with it.

By Mr. Da Ponte: That concludes the case for the Northern Pacific Railway.

[fol. 767] By the Director: Have the carriers any further testimony?

By Mr. Balmer: Yes, sir, we have some testimony.

H. McCaustland, being first duly sworn, testified as follows:

Examined by Mr. Balmer:

Q. Please state your name and occupation?

A. H. McCaustland, car foreman for the Great Northern Railway.

Q. You testified in this hearing in the two preceding sessions?

A. Yes, sir.

Q. At the last session you introduced in evidence a statement of the cost of car repairs, for a certain period up to June 25, 1921?

A. Yes, sir.

Q. What was the period covered by this previous statement?

A. Fifty-two days.

Q. Working days?

A. Yes, sir.

Q. What is your occupation?

A. Car foreman, Everett, Washington.

Q. Are you in charge of the repairs of all cars of the Great Northern at Everett?

A. Yes, sir.

Q. Have you continued, since the hearing of this case, to keep record similar to the one you put in evidence at the last hearing?

A. Yes, sir.

Q. Have you that ready to produce?

A. Yes, sir.

[fol. 768] Q. I show you Great Northern Exhibit #21, and ask you to state whether that is a statement of car repairs made by you as just testified to?

A. Yes, sir.

Q. Covering what period?
A. From June 25 to October 19, 1921.
Q. Is it correct?
A. Yes, sir.

By Mr. Balmer: I offer Exhibit G. N. No. 21 in evidence.

Q. The logging flats of what companies are shown by this statement?
A. Gold Bar and Sultan companies.
Q. Between what points do these two companies operate?
A. Gold Bar and Everett; Sultan and Everett.
Q. Are all of the repairs shown by this statement what might be deemed ordinary repairs?
A. Yes, sir.
Q. Have the cars repaired as covered by this statement all been actively in operation during this period?
A. No, sir.
Q. Explain what the situation has been?
A. Well, the Gold Bar Logging flats closed down somewhere about the 4th of July, I believe, but they were stored at Gold Bar and I took them in for general repairs as fast as shipments would permit, and this statement is the result of the repairs I made on the cars that were out of service.
Q. Up to the time that company closed down were the cars that were repairsd as shown by this statement actively in operation of that company?
[fol. 769] A. We did not use the cars from the time the logging Company closed down until they started up the first of the month.
Q In other words, all the repairs in this statement were repairs necessitated by logging operations?
A. Yes, sir.
Q. In the same connection, in view of the fact the Gold Bar company closed down about July 4th, are all the repairs shown on this statement necessitated by their operations and use of these cars prior to the time they closed down?
A. Yes, sir.
Q. What has been the situation with respect to the Sultan Ry. and Timber Company operating—Sultan to Everett?
A. The same exists with them as with the Gold Bar.
Q. Have they been closed down during a portion of the time covered by statement #21?
A. No, they have been in operation a month or five weeks, may be longer.
Q. Last past?
A. Yes, sir.
Q. During the period covered by this statement, were they closed down, was the making of accumulated repairs on these cars done for the same reason as the cars of the Gold Bar Co.?
A. Yes, sir.
Q. That is to say, both of these companies having closed down for

a certain period, their cars were brought into Delta as occasion would permit you to overhaul them and give repairs necessary?

A. Yes, sir.

Q. No repairs were made to these cars which were not the direct result of logging operations?

[fol. 770] A. No sir.

Q. During the period of the statement introduced at the last hearing, both of these companies were in active operation?

A. Yes sir.

Q. The purpose of this statement in connection with the one previously introduced is to show that the average cost per car mile as shown by that previous statement was not unduly high in view of the fact that during the period covered by this statement additional repairs were made to these cars.

A. No sir, I do not think so.

By the Director: Any objection to this exhibit?

(No response.)

The paper admitted in evidence, Marked G. N. Ex. #21.

By Mr. Clifford: The cost of repairs shown on your exhibit 21, are you prepared to say whether any proportion of that cost was refunded to the carrier by charge against the shipper?

A. I do not think so.

Q. Have you any positive knowledge yourself?

A. In this way, if the Great Northern were making any bill against the Wallace Falls Timber Company or the Gold Bar or the Sultan, the bill would be made in my office, and I have presented or made no bill against either of these logging companies outside of cars whose bodies have been completely demolished up in the woods.

By Mr. Balmer: I do not think you understood my last question. It was simply to bring out the fact that the statement which was [fol. 771] introduced at the last hearing would certainly not show an unduly high cost of the car repairs to these two companies, in view of the fact that additional repairs were made during the period covered by this last statement, and during a portion of the time covered by this last statement the cars of these two companies were not in operation; in other words, the previous statement shows repairs that were made while the cars were in daily operation, and this statement shows repairs made during a portion of the time the cars were not in operation.

A. I do not exactly get you. All the repairs shown in this statement at the last hearing, and also those on No. 21, all these repairs were work where damage was done actually by logging operations, as these flat cars handled no other commodity.

Q. During all of the time covered by your last statement, cars were in daily operation?

A. From the time they shut down?

Q. During the period covered by this statement you put in evi-

dence at the last hearing, both of these companies were in daily operation?

A. Yes sir.

Q. During a portion of the time covered by this statement they were not?

A. Yes sir.

Q. Will you describe in a general way the condition in which you found these cars, and the repairs you made to them?

A. The condition was very bad on the majority of them.

[fol. 772] Q. Go ahead and describe it so the commission, who have not seen the cars, will have knowledge of how they looked?

A. I applied 276 sills and splices as the statement shows. Due to these sills being broken, and the decking off, they to be all renewed. The under sills and safety appliances were in bad conditions. I put these cars here in reasonable shape. I put them through the shops, to have them available when the logging organization resumes work.

By Mr. Horan: How long had these cars been in work before this kind of repair work was necessary on them?

A. These cars have been running right along; they were running right along during the 50 days covered by the last statement, and then just prior to June 25, 1921, when the logging companies closed down, flat cars were stored at Gold Bar, and were not in use.

Q. Are any bills to be rendered to any of the companies for this repair bill or any portion of the repair bills?

A. No sir.

Q. Some of the companies pay their repair bills in a lump sum at the end of the year?

A. I understand not to the Great Northern. I do not know about the Milwaukee and the Northern Pacific.

Q. You can say that these companies whose cars you repaired, no bills were rendered and none will be rendered for any of these repairs?

A. I would not want to go on record and say the Great Northern won't bill any one for these bills, because I do not know what they will do. I have no instructions to bill them for any of this money.

[fol. 773] Q. You do not know whether the company will bill them?

A. I would not say.

By Mr. Carey: How many cars does this statement cover?

A. We have seventy-five cars assigned to the Wallace Falls Timber Company, and I am unable to say how many are actually assigned to the Sultan Railroad Company.

Q. Do you know how many cars this statement covers? You have lumped entire repairs amounting to about ten thousand dollars. How many are covered by these repairs?

A. I do not believe I can say.

Q. Is not the big element of damage on the damage and sills?

A. Yes sir, especially sills.

Q. Do I understand this covers logging flats of these two companies only?

A. Yes sir.
Q. No other?
A. For your information, I am sending one of these out each month, sending to our headquarters at St. Paul, just for logging flats alone.

By Mr. Balmer: With reference to any possibility of bills to loggers on account of these repairs—do you know whether or not it has been customary for the Great Northern Ry. Company to bill against the loggers for such expenses as are shown here?

A. I do not know as I could say positively. In my present information I do not believe they do.

Q. There is about 75 cars assigned to the service of the Wallace Falls Timber Company?
A. Yes sir.
Q. Do you know how many assigned to service of the Sultan Co.?
A. No sir.

[fol. 774] Cross-examination.

By Mr. Henderson:

Q. The Sultan Ry. Co. gets all kinds of flats, from any place on the system, any kind of flats?
A. I believe so.
Q. They might have 300 different cars in their service?
A. They would not have 300 different kinds of Great Northern. I have not that many different kinds of flat cars.
Q. I mean different flat cars.
A. Not as a rule; when those flat cars get into this logging service they stay there, because they come to the dump and are unloaded, and return empty.
Q. They are special logging flats? Just ordinary flat cars?
A. We have not any special logging flats.
Q. They may come from any place on the system?
A. I do not think so. I think they assign them 40 cars and the chances are these forty cars will stay in the season.
Q. You would not say they do?
A. I would say that they do, yes sir. I would not just say every one, if there was a new flat there that was not in service before, but I did not find any.

By Mr. Carey: Can you tell us what proportion of these $9,290 expenses for repairing sills and decking was done on cars assigned to the Sultan Company, and what proportion to the other company?
A. No sir, I could not. I did not separate them.

[fol. 775] By Mr. Balmer: Did you find any difference in general between the repairs to the cars of these two companies?
A. I do not think there is very much difference.
Q. Is it your judgment that the repairs to the cars of one company would run about the same as those of the other?
A. Yes sir.
Q. You did not keep any track of it?
A. The difference between them?

Q. Yes sir.
A. No sir.
By Mr. Henderson: Doesn't the Wallace Falls Timber Company have a different kind of car, with bunks?
A. The bunks are different; the cars are the same.
Q. They are equipped with bunks where they are used?
A. Some Sultan Company cars have bunks.
Q. All of the Wallace Falls Timber Company are bunked?
A. Yes sir.
By Mr. Balmer: Is it generally your experience that cars equipped with bunks has less repair cost than one not so equipped?

By Mr. Carey: I object. Let someone here produce a record.

Objection overruled.

A. My experience in a period of three years or two and a half years—the cost is about the same, whether the car is bunked or whether it is not.
Q. The history of one car over a period of three years equipped with bunks, would you compare with a similar car not equipped [fol. 776] with bunks over the same period would show about the same extent of car repairs?
A. Yes sir.

By Mr. Carey:

Q. You have never kept any track of the cars——
A. No sir.
Q. To find out what the relative cost would be?
A. I might say in this period of June 25 to October 17, I have taken eleven cars, blocks and sills and poles off, and have virtually re-silled them on account of their sills being bad.
Q. How long have the cars been in service?
A. I cannot say only the sills and poles are bad; two or three years I think.
Q. That would make some difference.
A. I just consider the life of the body of a flat car is about three years I think.
Q. That would make some difference.
A. I just consider the life of the body of a flat car is about three years, when it has to be re-silled.
Q. Sultan has not been operating longer than three years, has it?
A. I cannot say.
By Mr. Carey: On your statement of June 25, at that time your statement showed $11.75 for side sills?
A. 1920.
Q. Your statement of June 25, 1921, the one you introduced in evidence, exhibit 20. Now you charge for side sills $7.68. Why the discrepancy in the cost of these side sills?
[fol. 777] A. Where do you get this seven dollars?
Q. You have 276 side sills at $2,121.85, which divided out, makes $7.60 per sill.

A. Your statement must be wrong; mine says sills and splices; that is not a side sill; there is not 276 side sills in this period.

Q. Some of these were just splices?

A. Some of them, yes sir.

Q. You testified here during June that *ehrer* were 100 cars assigned to the Wallace Falls people and fifty to the Sultan people.

A. To the best of my knowledge.

Q. Now you say seventy five to the Wallace Falls people and you do not know how many to the Sultan people?

A. I do not know what there is today; that is, what there was at that time.

Q. Has that materially changed during the period covered by the last statement, or did it remain the same?

A. Changed, in my judgment. I believe that the logging was—that they would not require that much.

Q. You do not know how many ca-s were in the service during the period covered by the last statement?

A. I do not know what was in the service; I know what we assigned them.

Q. When did you make that assignment?

A. About three years ago.

Q. You would have the same assignment in the period covered [fol. 778] by the prior statement except in the present instance?

A. If business was heavy they would get maybe ten or 15 daily additional; that is, additional to what was assigned to them, for a week or ten days, and then their 75 would handle their business.

Q. That is the best answer you can give to that?

A. To the best of my knowledge.

Q. You say damage to cars equipped with patent bunks has been about equal to those not equipped with patent bunks?

A. I have found it so.

Q. In your former testimony in June did you not admit at that time that the reason for that was the faulty method of unloading bunks in tripping them, pulling them over the bunks and breaking the sills?

A. I do not think so. I do not think I gave that testimony.

Q. What are the facts as to whether damage to cars equipped with bunks would be very seldom presented, as compared with other cars if the method of unloading cars was the method intended when the bunk was invented, that is, to trip the bunk before pulling the load off?

A. I will say I do not think the logger bunks these flats for the benefit of the railroad, but to save them the trouble of using stakes.

Q. You so not answer my question.

A. My idea of the bunk is this; when they load the cars or when they unload them—we will take for instance, six logs on a load; they trip the bunk and the first log shoots out and the top log comes down and keeps pounding on this bunk, and keeps breaking the [fol. 779] center and intermediate sills on this car, or chewing it until in a period of two or three years we have got to renew all the sills in that car; and the whole weight of the log is on these bunks

and the sills under the bunks; consequently the life of these sills under these bunks is not as great as the life of a sill not under a bunk.

Q. Have you not on your main line places where there is a cable used without bunks?

A. I know nothing about unloading.

Q. If that method was used it would necessarily mean destruction of the car?

A. I could not say that. We have often cars derailed there, arch bars broken, oil boxes broken, on account of the top log falling down and making such a shape that it practically turns the car over, and when it falls back, she don't hit the rail but lands on the ties and also breaks the arch bars and oil boxes. Frequently we have to send men over to the dump to re-rail logging flats.

C. McDONOUGH, being first duly sworn, testified as follows:

By Mr. Balmer:

Q. You are the superintendent of the Cascade Division of the Great Northern Railway?

A. I am.

Q. You have testified at previous hearings in this case?

[fol. 780] A. I have.

Q. In connection with the testimony of Mr. McCaustland, during the period covered by his statement, do you know how many cars were assigned by the railway company to the service of the Wallace Falls Timber Company, operating from Gold Bar?

A. We had 75 cars equipped with logging bunks. At that time we had a surplus of flat cars, and we also furnished them with cars not equipped with bunks. I assume there was approximately 100 flat cars altogether in the Gold Bar service?

Q. That included 75 which have been in their service since they commenced operations?

A. Yes sir.

Q. Do you know about the date they commenced operations?

A. I do not remember; less than three years ago.

Q. What kind of cars were assigned to their service when they commenced? Were they new or old cars, in new or poor condition at that time?

A. Not exactly new cars; 43 cars in good condition, equipped with the bunks.

Q. The expense of bunking these cars was paid for by the Wallace Falls Timber Company?

A. Yes sir.

Q. Can you state the number of cars assigned to the Sultan Railway Company during this period?

A. Well, at the time of this statement of 52 days I believe that the Sultan people were not operating.

[fol. 781] Q. How many cars were in their service at that time?
A. Approximately 60 cars; that is, prior to June 25.

Cross-examination.

By Mr. Henderson:

Q. Is it not a fact that you have stated that the Sultan Company used 200 cars? And maybe they would come in some place off the system and be set in their yard?
A. I do not think so.
Q. Would you say that that had not been done during last year, and that it had not been the custom of the Sultan Logging Company people, that you handled cars that way for them?
A. The Sultan Logging cars a great many of them were not equipped with bunks, and when cars were out of service on account of bad order, if we had other flat cars available we would send them to them instead of the ones we held out. Prior to last October I would say we were very short of flat cars, and I cannot imagine of any time where we set in 200 cars at the Sultan Logging Company dump.
Q. Last spring for instance the logging industry was not very active was it?
A. No sir.
Q. During those times you would not set into the Sultan Logging Company yard a great many flat cars, more than 100 at a time.
A. Not that I know of.

[fol. 782] By Supervisor Spinning: What, if any, advantage is it to the railroad to have their cars bunked?
A. Well, that depends; if the unloading is done properly there would be the advantage of never using stakes; with the use of stakes there are more or less pockets broken, and sills damaged, but it has been our experience that the unloading is not properly done; that they will take and unload—fail to trip the bunks, and just unload the cars with main force, as testified by the car foreman; that is for the time being.
By Supervisor Spinning: Then if the unloading was properly done there would be benefit to the railroad?
A. To that extent, but we have another thing to contend with and that is the continual pound of the bunks both in loading and unloading; in unloading the top log drops down; in loading they will drop a log on to the bunks, and not set it down carefully; get it over the bunk, and away she goes; there is continual hammer on the bunks and that damages the sills.
By Supervisor Spinning: From the railroad point of view there is little or no benefit accruing to the road from the use of patent bunks?
A. That is our experience.
By Mr. Balmer: Have you observed the unloading of these cars at Everett?
A. No, I have not.

Q. Do you know where the logging cars do unload?

A. Yes sir.

Q. State where, then.

[fol. 783] A. Gold Bar logs mostly unload at the Weyerhouser dump located at Mill B, at Delta; Sultan logs are mostly unloaded near the West end of Delta Yard at what we call Blackman's point, Northern Pacific Unloading Dump.

Q. The cars of these two companies come down the main line into Everett?

A. Yes sir.

Q. One from Sultan Junction and the other from Gold Bar?

A. Yes sir.

Q. Will you state what use of the Everett Yards is made by the cars of these two companies after they have been brought into Everett by the road engine.

A. Well, the train that brings the logs comes into the yard, pulls in on one of the side tracks; after the cars are inspected and the switch engine gets around they pick up these cars; in the case of Gold Bar logs they make back-up movement to the end of the yard, the east end, and cross over on a connection that we have towards Mill B, and set the cars in on the unloading track there. In the case of the Sultan logs they have to take the cars to the West end of the yard; it is approximately I should say a mile movement, altogether.

Q. What is the mileage of the first movement you described?

A. It would be only a little—nearly a mile.

Q. When the cars arrive at that point are they always immediately unloaded?

A. Not always. Sometimes they come over to the Weyerhouser dump and they are blocked with other logs, but ordinarily, I would [fol. 784] say, they are unloaded immediately. The cars are set in there, and, that is, provided it is daylight handling, the car is unloaded. At Blackman's point I presume the same way, if the Northern Pacific is not handling cars, our logs are promptly unloaded.

Q. It sometimes happens you cannot get to the log dump at Blackman's point immediately with the switch engine handling these cars?

A. I think we can get in all right, but they are busy unloading the logs on the other end of the track.

Q. For that reason the unloading crew cannot begin unloading yours?

A. Yes sir.

Q. What further use of the switch engine and terminal facilities is made by these cars after they are unloaded, before they go out on the line with the road engine?

A. The switch engine has to back down after the empty cars and bring them back to the yard and have them inspected and sorted out—bad orders—switch out the bad orders to the repair tracks and back to the train yard; in the case of the Sultan logs, we gen-

erally have to keep a switch engine there while they are unloading them.

Q. Does the tide ever have anything to do with that?

A. It is on account of the tide conditions at Blackman's point.

Q. I do not know as I got the full significance of your answer as to the influence of the tide. Will you state that again?

[fol. 785] A. When the tide is low logs are not unloaded on the tide flats; there is not water enough to unload logs into, and the conditions at that dump are such that at low tide there is very little space into which you can unload the cars.

Q. Have you yourself made investigation from which you can state the number of hours' use of the switch engine is made by the crews of these two companies, daily at Everett?

A. I have had it up with our yardmaster. I have this statement. I have not made investigation by personal observation.

Q. What is his report?

A. His report is it takes on an average of about four hours to handle from 20 cars of logs upwards at the Weyerhauser dump, counting the time taking the cars away and bringing empties back, and switching out and in bad orders from trains, and that on the Sultan logs it averages six and a half hours.

By Mr. Carey: Where do these Weyerhouser logs come from?

A. Gold Bar.

Q. It takes four hours to handle that operation?

A. Yes sir.

Q. And 6½ hours for an equal number of cars from the Sultan people's?

A. Yes sir.

Q. How do you account for that difference?

A. On account of the conditions differing at the two camps.

Q. The cars that come from the Wallace Falls Timber Company [fol. 786] and are unloaded at the Weyerhauser Mill all have patent unloading bunks?

A. All except during last summer, as I stated, we have given them some additional flats on account of having a good supply of flat cars; they had approximately 25 additional cars in their service.

Q. Do you think it makes any difference in expediting the movement that the logs loaded from the Wallace Timber Company are moved on cars equipped with bunks?

A. Well, no, I do not think so much. I think it is the method used on the dump. On the Weyerhauser dump they do not care what they do to your cars; hook the derrick on and over she goes, whether the car goes or what; at the Sultan dump they cut the stakes. It is not as hard on our equipment.

Q. You say you do not think the bunk is of any material benefit to the carrier in the handling of logs? What equipment does the Great Northern have for unloading logs; that is, what type of log do they use if not equipped with bunks?

A. Any flat car.

Q. Do you consider that proper equipment for handling a commodity—logs?

A. Do I consider?

Q. Yes sir.

A. I could name better equipment. We have not got it.

Q. If you had the other equipment *through* the damage and deterioration would be much less than at the present time?

A. Possibly.

[fol. 787] Q. It undoubtedly would, would it not?

A. It would not be bunked flat cars though.

Q. You would use skeleton cars?

A. Then you have the safety appliance laws to comply with.

Q. In unloading cars not equipped with patent bunks it is necessary that the stakes be cut during the time the car goes on the inclined track?

A. That depends on—it should be partly cut.

Q. Unless they want to destroy the car it should be done?

A. Yes sir.

Q. It is very destructive on a car not to?

A. Yes sir.

Q. How long does it take ordinarily, with proper care, to cut the stakes on each car? Before it goes on the unloading dump?

A. I do not know.

Q. How long would you think? Or have you watch- the operation?

A. I have not.

Q. What the patent bunked car does—it takes the mere pulling of a lever as the car goes on and the car need not stop for that operation?

A. I do not know whether that would be necessary. Just set the cars in and trip the bunks.

Q. Consequently the time of unloading is materially shortened by the use of patent bunks?

A. Yes sir, it would be shortened.

Q. Assuming of course that the actual use, the recognized and practical method of unloading the car was made at the Weyerhauser dump in Everett—is it not a fact that even with patent bunks [fol. 788] they hook on cars with a cable and pull them off without using the bunks?

A. They have done that. That has been our observation and reports.

Q. And where they have wooden stakes on ordinary flat cars they do the same thing?

A. Yes sir.

Q. That is very destructive on the equipment?

A. Yes sir.

Q. And if the evidence here showed that your material has been unduly destroyed on that operation, would you not attribute it to the method of unloading at that particular dump?

A. Certainly.

Q. It is an unusual condition that does not exist when proper methods are used?
A. Yes sir.

Cross-examination.

By Mr. Henderson:

Q. I think you said at the Weyerhauser they unload with a derrick, don't they?
A. Yes sir.
Q. How does the top log drop down and hit the sills then?
A. I don't know, it does it, that is the report I have; as started I have not watched it.
Q. Ever see them unload with a derrick?
A. No sir.
Q. Do you know anything about operation of unloading with a derrick?
A. No sir.

[fol. 789] By Mr. Balmer:

Q. What you know is the appearance of the cars after they come back from dump?
A. Yes sir, and the repairs we have had.

By Mr. Carey:

Q. You do not find these conditions anywhere else on your line that you have at the Weyerhauser dump?
A. No sir.

By Mr. Balmer:

Q. Just what do you mean by that?
A. They don't handle the equipment like they do over there.
Q. You mean they don't handle it as roughly?
A. That's what I mean.
Q. Would you intend to infer that you have not any cars in the logging service that are subject to very severe damage in *long* operation?
A. No sir.
Q. What is your experience in that regard?
A. Considering the number of cars there the damage to the logging cars is very large, more severe than to other classes of equipment.
Q. Two of the largest movements—probably the two largest movements of your division are these two movements from Sultan and Gold Bar to Everett?
A. When they are operating normally.
Q. One of these uses this dump at which you have this very high damage?
A. Yes sir.

[fol. 790] C. N. BOLANDER, being first duly sworn, testified as follows:

Examined by Mr. Balmer:

Q. Please state your name and occupation?
A. C. N. Bolander, *B*hief Clerk, Western Traffic Manager Great Northern Railroad.
Q. You are an assistant in the Great Northern Traffic Department in rate cases?
A. Yes sir.
Q. Have you previously testified in this case?
A. No sir.

By Mr. Balmer:

Q. Will counsel admit the qualifications of this witness?
By Mr. Henderson: Yes sir.

Q. Have you prepared a rate comparison of the log rates of the Great Northern Railway Company with the service on other commodities handled by that company?
A. Not of all the log rates, but it gives rates on the principal movements we had in 1920.
Q. Principal movements of logs?
A. Yes sir.
Q. I hand you an exhibit and ask you if this is the one which you prepared.
A. Yes sir, it is.
Q. Will you tell the manner of operation of this exhibit and whether in your judgment the data collected are properly comparable?
A. The exhibit is simply showing the principal log movements [fol. 791] during the year 1920, and I have shown the distances, the current rates in dollars and cents for 1,000 feet board *made*, and have worked the rates out on weighted basis by using weight basis of 3825 pounds per thousand feet and then have shown comparisons of weights on other low grade commodities for similar distances.
Q. Do you have substantial movements of the other commodities?
A. There is substantially all the commodities under the rates shown.
Q. And what in general is the result of the comparison?
A. It shows that log rates are materially lower than the rates for similar distances on the other commodities.

Cross-examination.

Examined by Mr. Clifford:

Q. You stated there was a substantial movement of the commodities with which you compared logs?
A. Yes sir.
Q. Do you mean by that to infer that the quantity of the move-

ment of other commodities is anywhere near comparable with the log movement?

A. I think it would be on lumber and articles taking the lumber rates. It would not be on some of the commodities.

Q. The lumber movement and log movement are more or less related are they not?

A. Of course, it takes logs to manufacture lumber and I do not know just what relations you have in mind.

[fol. 792] Q. Aside from the item of export, the movement of logs is some indication of movement of lumber, is it not?

A. Yes sir. Of course, to move lumber you move logs, to produce lumber.

Q. Hay! What about the comparative amount in quantity of hay movement and log movement? Are they at all comparable?

A. The movement of hay under distance rates show- *there* probably would not equal the log movement.

Q. What about sand and gravel.

A. Sand and gravel is a commodity that does not move steadily like logs do. We have certain times when movement of gravel is very heavy and then again probably there will be no movement.

Q. As far as distance is concerned how does the average haul compare?

A. I could not say definitely without having the actual movement to compare. I have seen sand and gravel movements which far exceed the average movement of logs. Probably the average sand and gravel movement would be less than the average of logs.

Q. What about the movement of common brick?

A. Movement of common brick would compare quite favorably with logs. We handle common brick for considerable distances.

Q. You mean in average haul?

A. Yes sir. The average haul of brick would be as much or greater than of logs.

Q. In volume how would it compare.

[fol. 793] A. I could not say without having the figures.

Cross-examination.

By Mr. Henderson:

Q. How would the value of a ton of logs compare with the value of a ton of grain?

A. I don't know very much about values, but I would not suppose a ton of grain would be worth——

Q. Does not the value of movement have anything to do with the rate?

A. It has something to do but it is not the governing factor.

Q. Is it not such a controlling factor that you have certain rates for them, if they will sign certain releases and if they do not sign you make a much higher rate?

A. They used to have released rates, but they are based on declared value now.

Q. So that value is a controlling feature in the rate?

A. I would not say that. There are very few commodities on which we have declared value and declare lower rate.

By Mr. Da Ponte: Did you object to proving the value of slabboards yesterday on that theory?

By Mr. Henderson: Yes.

Q. Is it not a risk that the carrier takes in handling a commodity if not valued?

A. I said it h*a* some effect on the rate but it is not a governing factor.

Q. It is one of the governing factors?

[fol. 794] A. It has to be taken into consideration, yes.

Q. Are any of these other commodities that you mentioned, what would be a basis commodity from which you develop 60 per cent of your tonnage in the State of Washington, or anything approaching 60%.

A. No, none of them.

By Mr. Balmer: Neither are logs.

Q. Timber and timber-products is a majority of the tonnage of the railroads in the State of Washington, is it not?

A. I think so.

By Mr. Calderhead: With reference to your log rates, you have selected the commodity rates?

A. Actual current rates.

Q. In your sand and gravel and other commodities you have used distance rates?

A. We have no distance rates on logs.

By Mr. Dudley: Are there any distance rates on sand and gravel?

A. We have one. I recall now in the State of Washington. We have very few.

Q. The movement is practically on the distance travelled?

A. Yes, sir.

Q. You show a movement Springdale to Deer Park, and also a movement of sand. Is there any sand?

A. No, I did not intend that the rate shown for these other commodities represented the movements between the stations shown. I have taken the stations where log movements existed, and I have [fol. 795] computed other rates for similar distances with them.

Q. You don't contend there is any?

A. I do not contend there is any movement of these commodities between these particular stations, but there is movement between other stations for similar distances undoubtedly.

By Mr. Balmer: I have one more witness but he is a principal witness and I do not like to start his testimony and be interrupted. I do not believe we can finish. At the last hearing I was a little rushed in putting in my witnesses, and at this session I do not like to be rushed.

Mr. Henderson: I am afraid we will be rushed, if the loggers get to put in any witnesses.

The Director: We propose to give the loggers all the time necessary. We will take a recess until 9:30 in the morning.

Adjourned at 5 P. M. Oct. 25.

[fol. 795-a] IN SUPREME COURT OF WASHINGTON

[Title omitted]

CLERK'S CERTIFICATE

I, C. S. Reinhart, Clerk of the Supreme Court of the State of Washington, hereby certify that the above and foregoing, together with the six volumes accompanying the same comprising in all seven volumes, of which the within is Vol. 6 pages 796 to 1068 are a full, true and correct transcript of the record in the above-entitled cause, and that in pursuance of the writ of error heretofore received I now transmit the same together with the original writ of error and the original citation which is contained in Vol. 1 hereof.

In testimony whereof, I have hereunto set my hand and affixed the Seal of said Court, this 16th day of April, 1924.

C. S. Reinhart, Clerk of the Supreme Court of the State of Washington. (Seal of the Supreme Court, State of Washington.)

[fol. 796] 9.30 a. m. October 26th, 1921, hearing continued, all parties present as before, Mr. McDonough on the witness stand.

Mr. Balmer:

Q. Just one or two additional questions: In reference to your testimony yesterday, and Mr. McCaustland's, the suggestion was made by Mr. Henderson, or rather an inquiry, as to whether or not the Great Northern would bill the loggers for any of the expense of car repairs shown on Mr. McCaustland's two exhibits, what are the facts as to that?

A. Why as far as I know they wouldn't bill on the loggers for any of that expense.

Q. What are the grounds for your statement?

A. We never have been able to collect for damage to log cars except where the car was absolutely wrecked while in the possession of the logger and had to be loaded up on another car and brought in for repairs. In such cases the matter is taken up with the logger and we secure his acknowledgment or authority to bill them for the expense. This has been the method except that about a year ago we put on inspectors at several places to make a detail check of the damage done to our equipment while unloading or loading and we made a bill of that expense, and to my knowledge have never been able to collect it; and in conversation with Mr. Stevens of the

Stevens-Bird Company last night he told me that he had been paying our bills.

Q. Well as to the repairs to the cars of the Wallace Falls Timber Company and the Sultan Railway & Timber Company, covered by [fol. 797] Mr. McCaustland's exhibits, do you know of any bills having been rendered or of any bills being likely to be rendered against those companies for the repairs shown in that statement?

A. No.

Q. I believe you made a suggestion yesterday Mr. McDonough, to the effect that possibly Mr. Irving, or rather the Sultan Railway & Timber Company, might not have been in operation during the period covered by our exhibits, which Mr. McCaustland introduced at the last hearing, what have you found out about that?

A. Why the Sultan Railway & Timber Company did operate during that period up until about June 10th, and the statements are made for 52 working days, ending June 25th.

Q. Are you sure that the date that he closed down was June 10th?

A. No, I am not sure. That is the approximate date.

Mr. Henderson: You got your information from Mr. Irving?

A. Yes.

Q. Now is it the policy of the railroad not to charge shippers or any person else for damage which the railroad suffers to their equipment, done by other people?

A. No, it is not the policy.

Q. It is the business of a railway man to recover those damages?

A. If they can.

Q. Well you have never made any attempt except to send them a bill, have you?

A. Well I am not prepared to say as to that. We have made bills [fol. 798] and have not been able to collect it. I don't know how far the railway has gone in the matter of taking legal steps.

Q. Why do you say that a railroad will not take any steps for damages, in the matter which Mr. McCaustland referred to?

A. Because they have never been able to collect.

Q. So far as you know all they have done is to ask the loggers to pay?

A. As far as I know; I don't know what other steps have been taken.

Q. You do consider repair bills occasioned by wrongful usage of the car involving repairs to the extent that Mr. McCaustland testified to, as a proper charge against the individual shipper?

A. Yes.

Q. And are you making any contention that because they don't pay it when they are requested to that you ought to infuse in a rate a sufficient amount to take care of damages that some individual shipper causes and don't pay for?

A. I am not making any contention.

Mr. Henderson: All right, that is all then.

Mr. Balmer: The only bills you know of any logger having paid are bills for damages done to the cars in the woods, while the cars

were in the possession of the loggers, with the exception, I suppose of the repairs against Mr. Stevens, which you mentioned a short time ago?

A. Yes, and further qualifying that by saying wreck repairs, [fol. 799] where the car is absolutely wrecked in the woods. There is lots of other damage done to the equipment in the woods besides that.

Mr. Henderson: Would you say that none of them have ever paid any damages except for what was done in the woods, either from the Wallace Falls Timber Company or the Sultan Railway & Timber Company?

A. To my knowledge they have never paid any bills, as I say, except where the cars were wrecked.

Mr. Henderson: That is all.

Mr. Balmer: We will call Mr. Turnburke.

V. P. TURNBURKE, a witness produced on behalf of the respondents, after being first duly sworn, testified as follows:

Direct examination.

Mr. Balmer:

Q. What is your occupation?

A. Statistician for the Great Northern Railway Company, St. Paul.

Q. What experience have you had in railroad accounting and cost finding?

A. From 1914 to 1917 I was Assistant Statistician and Statistician for the Chicago, Milwaukee & St. Paul Railway Company at Chicago. From 1917 and most of 1918 I was Statistician for the Great North- [fol. 800] ern Railway Company. The latter part of 1918 and all of 1919 and to the end of Federal Control, I was Assistant Manager and later Manager of the Operating Statistics Section of the United States Railroad Administration, having charge of the compilation of all uniform statistics made by the Railroad Administration, together with the monthly summaries prepared showing results of operation of all the roads in the country. At the end of Federal Control I came back to the Great Northern Railway Company, March 1st, 1920, as Statistician, which position I have held to date.

Q. What was the nature of your technical training at school?

A. I am a graduate civil engineer, and following my graduation for three or four years I was engaged in engineering work for the Michigan Central Railway Company and the Chicago, Milwaukee & St. Paul Railway Company.

Q. Have you prepared an exhibit Mr. Turnburke, which is intended to show the cost of handling the log traffic of the Great Northern Railway Company in the State of Washington?

A. I have.

Q. Let me show you Great Northern's Exhibit 23, and inquire whether that is the exhibit that you prepared, as just stated?

A. It is.

Q. Is it, in your best judgment, correct?
A. Yes sir.

[fol. 801] Mr. Balmer: I offer Great Northern's Exhibit No. 23 in evidence.

(Marked No. 23.)

Mr. Balmer: I think we had better commence on page 2 of this statement, page 10, I understand, being a summary of the other pages?

A. Yes sir. I might make a preliminary statement however, as to what this exhibit shows. This exhibit was prepared in an endeavor to find the cost associated with the log movement on the Great Northern Railway Company's lines in the State of Washington, reducing all costs to this effective since July 1, 1921; that is, taking account of the reduced wages prescribed by the Labor Board, and also the reduction in materials which have resulted since that date; that is to say, the present wages and costs of material. These costs have been compared with the revenues received from the present revenues, based on the traffic for the year 1920.

Q. Will you refer now to page 2 of your exhibit and tell the method of its preparation and what it is intended to show.

A. In the first place the cost has been broken up into the three main items of cost, operating expenses, taxes, and capital charges applicable. The operating expenses have been further broken up into road haul costs, yard handling cost and other items of operating expense. Pages 2 and 3 show the development of the cost as found for road haul.

Q. Now what movement on the Great Northern was taken as typi-
[fol. 802] cal of the road handling of logs on the Great Northern?

A. The movement from Gold Bar to Everett, Washington, was selected as being representative of the average movement in the state, and an endeavor was made to ascertain the cost connected with that movement.

Q. Now will you state what the reasons were for selecting the movement from Gold Bar to Everett?

A. There were several reasons. In the first place the length of haul, 31.3 miles is approximately the same as the average length of haul of all logs on the Great Northern Company's lines in the state.

Q. The fact as just mentioned by you is shown in Mr. Gray's Exhibit in this case?

A. Yes, Mr. Gray's exhibit shows, as I remember, something over 32 miles, so this movement is slightly less than the average. In the second place we have here a movement which is made over the main line, with the resulting low cost which goes with a main line movement. Testimony along this line having been introduced by other witnesses to show that the cost of the main line movement is less than the cost made on branch lines. In the third place an analysis of road hauling cost was conducted for solid train loads of logs only, which results in a lower cost being ascertained, and the Public Serv-

ice Commission was already on record in another case in their findings with the statement——

Q. Just a moment, without attempting to state the purport of the findings in that case you have reference to, let me ask you whether [fol. 803] the case you have in mind as having been previously passed on by the Department of Public Works is the case of the Wallace Falls Timber Company vs. the Great Northern Railway Company, No. 5096, involving this line tariff between Gold Bar and Everett?

A. Yes sir.

"Mr. Balmer: I offer in evidence a certified copy of the Department's Findings and order in the case of the Wallace Falls Timber Company vs. Great Northern Railway Company——

Mr. Henderson: I think we will have to make an objection for the reason that the finding that this Commission made has not been accepted by this particular carrier, and that that order and decision has not been accepted by the carrier, but on the contrary they have contested it in the Superior Court and secured a reversal of it in the Superior Court, therefore it is not competent evidence in this case on behalf of the carrier.

The Director: What is the purpose of it?

Mr. Balmer: The purpose of it is to show what the Commission found with respect to this road movement, Gold Bar to Delta, in a previous case, in comparison with the handling of logs by the Great Northern Railway Company and other carriers in the state, and as indicating that to say the least it was the view of the Department of Public Works that that operation was not less favorable from the standpoint of the carriers than other logging operations in the state —I mean to say it was not more favorable from the standpoint——

Mr. Henderson: We object unless it is the intention of the carriers [fol. 804] to offer this in evidence as proof of their theory of the case rather than as proof that the Department might have taken that theory in some other case. If it is offered for the purpose of showing the theory of the carrier we withdraw our objection, but if it is offered for the purpose of substantiating some other proposed theory then we object.

Mr. Balmer: Certainly the weight of the findings of this Commission are not affected by the theorizing of anybody, and these findings have been made by the Department in a previous case and are entitled to be put in evidence in the present case without regard to what other parties may think about them.

The Director: Couldn't that be cited in briefs the same as any other decision without the Department admitting it?

Mr. Balmer: Not as I understand it. If either side is so unfortunate in this litigation as to have to establish it in the courts——

Mr. Henderson: Until this becomes a binding finding of some kind it is only argumentative anyhow, and if it becomes a finding that is binding upon the Department and the Courts in any way then I would say perhaps the position of counsel is correct, but even then it is merely a position of this body or some other body. I think

it is incompetent to put it into the record until it becomes thoroughly binding. I believe if this Department is absolutely bound by it it [fol. 805] could be put in, but when it is purely argumentative and not accepted by the party introducing it, and being before the court at this time, I think it is not proper——

Mr. Welsh: I think it is governed by the same rules as the introduction of evidence in any other case, if this is an order that has been appealed from or writ of review sued out. This order has been suspended, and in no case is an order or judgment which has been appealed from or from which a writ of review has been sued out—which operates as a suspension—competent evidence, unless the subsequent proceedings are also offered in evidence. Now if that is a fact and they have been suspended, as we all know *as we all know* it has by writ of review, then these findings are qualified by the writ of review and consequently have no place in this hearing as evidentiary evidence——

The Director: The offer will be denied. I don't see the materiality of it in this case, and furthermore the order specifically states that it is without prejudice to any order we might make in the general log rate case.

Mr. Balmer: That is true of the order, but as to the findings there was no such statement made

The Director: We have ruled on it, that it is denied.

Mr. Balmer: You would not permit me to make further argument with reference to its dismissal?

The Director: I think not, we have ruled on it.

Mr. Balmer: Regardless of what might be said?

(Exhibit marked "Rejected.")

[fol. 806] Mr. Balmer: I would like to state here for the purpose of the records that the parties of the Wallace Falls Timber Company vs. the Great Northern are also parties to this case; Mr. Frost of that company being here, and also the Great Northern.

Mr. Henderson: For the purpose of the records might it show that neither Mr. Frost nor the Wallace Falls Timber Company have served their appearance in the case.

Mr. Da Ponte: I asked Mr. Henderson to tell me whom he represented under the name of the Associated Loggers. We ought to know who they are. They are not a corporation and they ought to file a list of whom he represents so that we will know who he represents here. I made that demand on Mr. Henderson and wrote him and asked him and got no reply; I made a demand on him that he file a list of the firms or corporations who are represented here under the name of the Associated Loggers.

Mr. Henderson: That wouldn't be an appearance of any individual person of that association if I did file it, it wouldn't bind particular stockholders in the corporation in reference to their individual matters.

Mr. Da Ponte: I am calling on you for that, I think we ought to know what the name of the corporation or firm or individual you

represent here —, so that we will know who is bound by this proceeding hereafter.

Mr. Henderson: I will state that I will expect to put on Mr. Frost of the Wallace Falls Timber Company on the stand later, but as to [fol. 807] entering an individual appearance here he is not, and there is no necessity for it. It is a question between the commission and the railroads in which any interested party has a right to put in their evidence.

Mr. Da Ponte: Do you refuse to name them?

Mr. Henderson: I couldn't tell you.

Mr. Da Ponte: Whom do you represent?

Mr. Henderson: Mr. Chinn.

Mr. Balmer: Let me make this suggestion in this connection, regardless of Mr. Henderson's capacity, Mr. Horan has already appeared and examined witnesses in the present case in behalf, as I understand it, of the Wallace Falls Timber Company. Mr. Horan and Mr. Frost are both present now and Mr. Frost undoubtedly intends to testify. Wouldn't it be proper for the Department to call upon Mr. Horan and Mr. Frost to state at this time if they are making an appearance in the case, and if so, for whom they appear?

The Director: I don't think it would make any difference as far as the introduction of this record is concerned, or for any other purpose. This hearing is for the purpose of determining what are reasonable log rates and anyone interested has a right to appear.

Mr. Da Ponte: Ought not the records to show that they all signed up here as to who they appear for? We are bound by this record and judgment.

The Director: Everybody is bound by whatever rates we prescribe, which I presume will be binding on any shipper as well as the [fol. 808] carrier.

Mr. Da Ponte: Yes, but he comes in here in a future proceeding to attack the rates——

Mr. Henderson: Then it would not prejudice you at all.

Mr. Da Ponte: It would, he has had his day in court. They ought not to try to conceal their appearance in the case. It is rather an extraordinary thing.

Mr. Henderson: I am willing to state to the commission just exactly where I am on this proposition. There are other matters involved besides this particular rate, there may be contracts and other matters involved between the carriers and the individual shipper that may result from this case, and there is no reason why individuals who might be interested in this log rate should come here and file their appearance. They file in the case under the name of the Associated Loggers, and the director says they will all be bound by it, and as far as this rate is concerned they could turn around and file another rate.

Mr. Da Ponte: We now begin to see the bug under the chip. The commission has asked for these contracts and we have offered these contracts and they are in evidence; now that is for the purpose of submitting to the commission the whole subject matter of what

would be done about them and this is the time to settle these questions, and if it is going to be the idea that the commission passes on these contracts and after those contracts are ordered made over that they will come into court at some future time before the commission and say—they were not here, you have no right to make any order [fol. 809] on this contract to effect our rights. Now the railroad has to limit the effect of this proceeding by the appearance of these parties.

Mr. Henderson: I am not trying to limit them but as far as these contracts are concerned, the supreme court as a matter of fact has held specifically that it is not even necessary to notify the parties in order to effect these contracts. This Commission is not going to deal with those matters, and all we are interested in is the rate; and in the Raynard case, that went up from this commission, the court said a contractor had not received any notice and was not entitled to any notice.

The Director: Proceed with the case.

Mr. Balmer: I understand that the exhibit offered shows that it was rejected, for the purpose of the record.

The Director: Yes.

Mr. Balmer: All right go ahead with page 2 of your exhibit and state the mode of its preparation in detail.

A. To review then, the reason for selecting this movement was, first, that it is approximately the same haul as the average haul of all logs in the state; 2nd, that the traffic is handled in solid trainload lots, entirely on the main line, with such reductions in cost as results from a main line movement compared with branch line movements on many other shipments of logs in this state. A study of the train register, which is the dispenser's train sheet, for August September, October and November 1920, showed 19 east bound empty trains and 24 west bound loaded trains as moving between [fol. 810] Gold Bar and Everett.

Q. In the log service?

A. In the log service. By reference to the train and enginemen's time slips for these particular movements, and applying to the time in service, the rates existing since July 1st, 1921, the wages of train and enginemen are determined as shown in the first tabulation on sheet 2. The engine service expenses, comprising locomotive repairs and engine house expenses, lubricants and locomotive supplies are determined from records currently kept by the Great Northern Railway Company for the class of engine in service between Gold Bar and Everett, using the average cost per locomotive mile for that particular class of engine and that particular district for the month- of July and August 1921. Thereby introducing the reduction in wages and material cost existing since that date. The 3rd main item of expense shown on this sheet is fuel. The cost of fuel shown was determined by study of the individual fuel oil ticket, showing a record prepared by the engine men at the time, of the quantity of oil consumed on these particular trips. To that quantity was applied the average cost of fuel oil in the month- of July and

August 1921. Recaptitulating the items of expense previously enumerated and reducing them to a cost per car—the number of cars being shown in the first item on the sheet—a cost of $6.36 is indicated per loaded car, including the east bound empty movement.

Q. All right, refer now to page 3.

[fol. 811] A. Page 3 shows the car repairs assignable to this movement. The costs were based on the 52 day study prepared by Mr. McCaustland, and introduced at the previous hearing, reducing them to the cost per car shown of $3.29 for July 1st, 1921; the car repair men's wages were reduced 10 per cent, and making an allowance for this reduction, the average cost of car repairs is reduced to $2.96. That this figure is eminently fair is shown by a comparison with the figures introduced by Mr. McCaustland in this case. The average cost for car repairs per car, log cars only, at Everett, during the 52 day period ending June 25th, was $3.29 was shown by this exhibit. The average cost from June 26th to October 17th, most of which period was at the reduced rate of wages, was $7.19, and the average cost for the entire period, comprising 175 days, from April 25th to October 17th, was $5.13 per car. Compared with this figure we have used $2.96.

Q. Just a word in that connection, you have used here in determining average cost of $3.29 per car, the figures shown in Mr. McCaustland's statement introduced in a previous hearing?

A. Yes, sir.

Q. And when you make the comparison of that with the other figures you mention you have reference to his figures introduced in the present hearing, concerning which he testified yesterday?

A. Yes, sir, combining the direct traffic expense and the car repair cost. The last items on page 3, we have a cost indicated of $9.32 per car but I might explain that where the words "per car" are used [fol. 812] it means per loaded car, including the figures of allowance for the empty movement.

Q. One further question in connection with Mr. McCaustland's testimony introduced at this hearing, you testified as to what the figures shown on his statement amounted to per car, how do you reduce his figures to a per car basis?

A. The figures which I have quoted for the period there, June 26th to October 17th $7.19, and from April 25th to October 17th $5.13 per car, were determined in exactly the same way as the figure of $3.29 was determined on this sheet; that is, by dividing the total cost of repairs to log cars made during the period under consideration by the total number of loaded log cars handled into Everett during the same period, whether repairs were made to the cars or not.

Q. Now referring to sheet four.

A. Sheet 4 is a determination of the cost of switching service in connection with the handling of logs at Everett, using of course the reduced wages and material costs effective after July 1st, 1921. The first group of figures gives the wages of your crews for 8 hours at $29.36, this being the figure on the reduced wage basis. The engine service expenses are found similarly to that of the engine service

expenses for road service, based however on the class of engine handling these log cars in the Everett terminals, which of course has much smaller power than the road engine and the cost there consequently less. According to the Interstate Commerce Commission's [fol. 813] rules all yard service is reduced to the locomotive mile basis, by multiplying the number of hours in service by six miles per hour. Manifestly it is impossible to find the actual distance traveled by the locomotive per day, so the arbitrary rule of applying 6 miles per hour to the time in service has been adopted. The costs per locomotive mile, average *ofr* July 1921, shown in the 2nd group of figures, was determined by dividing the total cost for the particular class of locomotive under consideration by the number of hours that the locomotive was in service, multiplied by 6, consequently to reduce the yard service back to an equivalent 8 hour day; the average cost of 74 cents should be multiplied by 48 producing the figure of $35.60, showing the grand total cost for 8 hours for wages and engine service *or* $54.96, or $8.12 per hour.

Q. What was the basis of your determination as to how much of that time should be applied to logs handled in the Everett yard?

A. The time spent in switching the logs in the Everett yard is the actual time in service of the locomotive for this particular type of movement, that is, they handle logs only, and to the destination shown. Mr. McDonough yesterday testified to the time consumed by the switching engine in making this movement, consisting of course in moving the logs to the dump, returning the empties to the yard, inspecting train, twitching out bad orders to the rip track, taking bad orders from the rip track back to the train and making up the [fol. 814] train for road service——

Q. Now let me ask you why it was that in the determination of the Everett yard figures you referred both to the cars of the Sultan Railway and Timber Company and the Wallace Falls Timber Company, while in connection with the road haul you referred only to the Wallace Falls Timber Company log cars?

A. We are not particularly interested in this case as to the average cost of performing service for any particular company, but we are interested in determining the average cost experienced by the Great Northern Railway Company for all service. The reason we happened to select the Gold Bar and Everett movement for road service, was that it seemed to admirably fit the situation as regards the average situation on the Great Northern Railway Company's lines. Similarly in connection with the yard movement we have determined the average cost per car for all cars handled in the Everett terminals. Had we used the cars handled from Gold Bar only we would have obtained the cost for that particular movement but not a representative cost as to the average cost which the Great Northern Railway Company has to meet. Turning now to the middle group of figures on the sheet, we have weighted the hours in service to the two destinations, the Weyerhauser mill and the Northern Pacific dump, by the number of cars handled in 1920, to obtain the average figure of 4.8 hours in service for all cars. Reducing this total time of 4.8 hours [fol. 815] to a cost basis on the $8.12 per hour as previously had been

ascertained, we obtained a cost of $38.98. That, divided by the average number of cars handled per day is $1.82 per car. To this has been added certain items of other expense in connection with the yard operation at Everett, namely the wages of yard master, yard clerks on the basis of the reduced wages of course for July and August 1921, dividing those wage costs by the number of cars handled during the same period to produce the average cost per car handled of 27 cents. Now in counting the number of cars handled in the Everett terminals as shown by this statement, 16,959 cars, it is customary on the great Northern Company's records to count the cars into the terminals as one and out of the terminal as one; so that to ascertain the cost in connection with the movement of logs we should have an equivalent cost of two cars handled, or 54 cents. Identically the same result would have been obtained had the method of counting the cars in the Everett terminal been different, that is, counting the loaded cars only. Adding the cost of 54 cents to $1.82 previously ascertained we have a total cost per loaded car in connection with the yard service of $2.36. Turning now to page 5 we have endeavored to add to the direct cost already ascertained and which comprises a large portion of the total expense, the other items of indirect expense. The first item on the sheet shows the freight proportion of the total maintenance of way and structure expense for the State of Washington for the year 1920. The separation between freight and passenger having been determined by the rule for separating operating ex-
[fol. 816] penses between freight and passenger and ordered by the Interstate Commerce Commission in its order effective January 1st, 1920. From this total freight maintainance of way and structure expense has been deducted all items of snow and snow sheds, removing ice and snow, and wharves and docks, it being thought that these items of expense have no direct connection with the log movements as they are not in the particular territory where expense is incurred for these services. The Interstate Commerce Commission basis for separating the main items of expense under maintainance of way and structure is the basis of the amounts spent for fuel consumption. This is on the theory that the fuel consumption bears a direct relation to the amount of steam produced; the amount of steam produced being in turn related to the tonnage of the train handled and the speed at which it is handled. Formerly, the Interstate Commerce Commission made studies of several different bases, in fact as many different bases as had been proposed up to that time, and determined that the fuel consumed basis was in the nature of a medium between the extremes found by other different methods, and therefore they arrived at this basis and introduced it into their order effective January 1st, 1920.

Mr. Balmer: And you have used that same basis in dividing your operating expenses between logs and other freight?

[fol. 817] A. I am just coming to that. As the fuel consumed basis has been used in dividing the maintainance of way expense between freight and passenger it is only logical to assume that the same basis should be applied in separating the freight expense between log service and non-log service, and this basis has been used in the statement.

Applying the same number of barrels of oil consumed in these direct road movements shown in that previous sheet, to the average cost per barrel of oil existing in 1920, we determined the amount of fuel consumed by the log trains and later the proportion of maintainance of way and structure expenses applicable to logs on the basis of the ratio of the fuel consumed by log trains and that consumed by all freight trains. Applying this figure of slightly less than 1/10th of one per cent to the total freight, maintainance of way and structure expense, after eliminating non related items, we determined the average cost per loaded car of $4.61. Up to this point all the figures have been based on the year 1914 for the reason that we could not take the month of August or September or both of these months as right as they had not included the entire maintainance cycle of one year.

Q. When you said a minute ago that up to this time all expenses have been based on the year 1920 did you mean all expenses on sheets prior?

A. Yes, I mean on sheets prior. Therefore it is necessary to reduce this expense of $4.60 per car to what it would have been had the [fol. 818] present wage scale been in effect, and this has been done in the analysis on the sheet which follows. The first group of figures showing reduction of 17½ cents per hour for July 1st, 1921, and the second group of figures show the 1920 actual maintainance of way and structure expense, and 1920 on the basis of the wage scale effective July 1st, 1921 for the Cascade division. You will notice on the first line the figures for January to April are the same in both columns, that is because as shown in the statement just preceding it the present rate of wages was the same as the wages then in effect, from January 1st to April, 1920. Following this through to a conclusion we find that if the reduced wage scale had been effective for the entire year the actual maintainance of way and structure expenses would have been slightly more than 88 per cent of the figures which were actually encountered.

Supervisor Cleland: You mean by that that the wages have not actually been reduced?

A. No sir, the figure of $4.61 per car of both is based on 1920 costs. Now I am endeavoring to put that to the basis of the present cost, and I arrived at that final figure at the bottom of the sheet, $4.06 per car instead of $4.61 per car, and I show that by finding the ratio of the present expenses to the actual expenses incurred in 1920 in those two sets of figures at the bottom of the sheet and finding out that the present expenses are 88 per cent of the actual 1920 expenses.

Supervisor Cleland: What I had in mind was that the rate (wage) [fol. 819] reduction ordered by the Federal Board had been put into effect in July 1921.

Supervisor Spinning: What other elements of expense have you taken into account other than the wage element?

A. By this analysis all items of expense have been reduced in the same proportion as the reduction in wages.

Supervisor Spinning: Material and plant service?

A. What do you mean by plant service?

Supervisor Spinning: Well you had a designation here yesterday of charging 17% for the use of the plant in log business.

A. Well, any expenses that would be assigned to maintainance of way and structure including labor and material and any other items, have all been reduced by 12% here over 1920 expenses. The reduction would have been 17½% had the advance scale of wages been in effect the entire year of 1920, but it was not in effect, they didn't come into effect until May 1st, 1920. Prior to that time the same scale of wages was in effect that is in effect today, so that changes the amount of reduction from the 17½ per cent to approximately 12 per cent here.

Mr. Balmer: In other words, wherever you have made the reduction of wages as you have in every case where there is a wage expense applicable to this business, you have assumed a corresponding reduction in material costs as well?

A. As far as maintainance of way and structure is concerned, yes. [fol. 820] As far as the other items of expense is concerned, no. I have used the material reduction in expense for all other items than maintainance of way.

Q. To make the matter clear, in connection with fuel for instance, you determined the actual fuel consumed on the road during the year 1920, but in computing that item in your study you applied to that amont what the same fuel would cost at the present time?

A. Yes sir. Fuel is the higgest single item of expense that we have to encounter in totaling. Next to the wages it is the biggest item of material cost of all items of material cost, and all items of material cost reflected in these previous sheets in addition to fuel, lubricants, locomotive supplies and any items of material costs going into locomotive repairs and engine house expenses, for instance, have all been determined on the present basis of cost, not by a percentage reduction from last year's figures. The only place where that has been done is on this maintainance of way sheet and there has been no other way that I know of to determine this figure satisfactorily.

Mr. Clifford: Referring to page six Mr. Turnburke, could you state what items were included under your column "miscellaneous expenses" applicable but not included?

A. I have not come to sheet 6 yet.

Mr. Balmer: Are you now ready to take up page 6?

A. Turning now to page 6; we have already accounted for the road haul costs and yard haul costs, and the maintainance of way and structure expense on an actual out of pocket expense basis, and sheet 6 is designed to include those other items of expense not already [fol. 821] included. On this sheet is set forth in three columns the freight operating expense in the state of Washington for the year 1920 as determined on the basis of the Interstate Commerce Commission separation of operating expenses effective January 1, 1920. In the first column, are the expenses included in detail from the total expenses for the accounts enumerated which we have already taken account of. Now I didn't mean to say that we have assigned to log service for instance, under account 394, fuel for train locomotives $2,001,926.68, but I do say we have directly assigned the correct

proportion of that account. In the last column, expenses not applicable, I show the items which may not have a direct relation to the log service. The first item of $297,000 being the total of the same three items shown on sheet 5, and the last item in that column being "loss and damage to freight". The amount shown under miscellaneous expense applicable but not included is the difference between the sum of the other two columns and the total freight operating expense in the state of Washington in 1920. The principal items included in that item of $2,715,000 are all the general expenses and all the traffic expenses, freight proportion only. The last item shows the figure which this whole sheet is designed to ascertain, namely the ratio of the miscellaneous expenses $2,715,000 to all other expenses. Now you will notice that that is not the ratio of miscellaneous expenses to the expenses included in detail but to all other expenses, that is, it has been assumed that the $2,715,000 should be probably [fol. 822] associated with the items shown in column 1 and probably associated with the items shown in column three. In other words, had the ratio been that of the miscellaneous expenses to the expenses included in detail the figure would have been higher than that shown on this sheet. The figure is slightly more than 25%. That is to say, that we have already determined items of expense which should be increased by 25% to reach the total operating expenses applicable. In other words, we have determined approximately 80% of the actual expenses associated with this movement, leaving about 25% of the 80%, or 20%, to be otherwise assigned. This assignment is made on page 7 which is simply a recapitulation of the third item of direct expense previously included, maintainance, of way, roadhaul and yard handling, and adding thereto the miscellaneous expenses, ratio of something more than 25% we obtain the total operating expenses on the loaded car of $19.81. Applying this to the total number of cars of logs handled in 1920 we have the total cost of $425,578 as indicated.

Q. As indicating the expenses under the present prices of handling the same number of cars?

A. As was handled in 1920, yes. Turning to page 8 we find an assignment of taxes to the log service based on the ratio of the log revenue to the revenue within the state as applied to state taxes, and the revenue of the system as applied to the United States government taxes, from which we determined the total taxes chargeable to [fol. 823] logs, the last item, of $36,322.

Q. The basis of assignment of taxes to the log service is in the proportion which the revenue from the logs bears to all revenue freight and state operations as to state taxes and bears to all revenue from system operations as to United States Taxes, or which we might call system taxes, is that correct?

A. Yes sir.

Sup. Spinning: That includes passengers?

A. This is gross revenue, freight, passenger, switching, sleeping and dining car, and all the items that go to make up the gross expenses of the railroad company.

Mr. Balmer: What is the generally accepted practice among ac-

countants at the present time as regards the assignment of taxes in cases of the present kind?

A. I could not say that there is any generally accepted plan, that is, there has been no one basis universally agreed upon, but it has been recognized by accountants generally and used in many other cases, that the gross revenue is a proper basis for dividing taxes, largely on the theory that you have to pay your taxes from your gross revenue.

Q. All right, go ahead.

A. Turning now to page nine we have an assignment of capital charges in connection with the movement of logs between Gold Bar and Everett. The valuation of the Great Northern Company's lines in the state of Washington between Gold Bar and Everett is determined by the state equalization committee in its report for 1921, [fol. 824] when applied to the miles of main line and miles of siding between those points, produces $103,124.57 per mile, as the valuation assigned by this committee. Testimony was introduced yesterday by Mr. Calderhead to the effect that this valuation does not include additions and betterments made recently, and it is shown on other exhibits introduced by the Great Northern Railway Company that from 1908 to date there has been nearly $18,000,000 added to the roads of that company's system in the state of Washington. The figure shown on this sheet of $103,000 applies to road only. No allowance being included for equipment.

Q. Now in determining that figure you first multiplied the value per mile of main line by the number of miles of main line between Gold Bar and Everett?

A. Yes sir.

Q. Now how did you determine what amount should be included there for sidings?

A. Similarly I applied the mileage, the actual mileage of the siding in between Gold Bar and Everett to the valuation per mile as shown in the report of the State Equalization Committee.

Q. Now in determining the miles of siding to be included, how many miles of siding at Everett were included?

A. In order to be absolutely conservative in this connection we have added for the mileage in the Everett terminals one mile as this represents approximately the distance over which the switch engine in the Everett terminals handles these logs to the Weyerhauser and Northern Pacific dumps, as testified to by Mr. McDonough yester- [fol. 825] day. It does not however include any allowance for the other yard tracks in the terminals which are necessarily used by the log service.

Q. All right proceed.

A. Reducing this valuation of $103,000 per mile to the total valuation for the entire 31.3 mile movement, and applying an interest charge of 6%, we have the figure shown of $193,667.94 as representing the interest at 6% on the valuation on the road only between Gold Bar and Everett. Here again the 6% figures were used in an endeavor to be conservative, because it is the minimum

amount which should be applicable to this line and it is interesting to note in this connection that this company in connection with another large carrier, the 1st of July 1921, owe $230,000 for which it paid 7.65 per cent interest. Reducing this amount of interest at 6% per annum to a train basis, we find the average capital charge per log train of $78.61, which divided by the average number of cars per train produces $3.04 as the average capital charges per loaded car of logs to be assigned.

Q. Now in that connection, Mr. Turnburke, have you made any calculations of capital charges on any different basis than shown in this exhibit for the purpose of determining what different methods of calculation would produce as compared with what you have shown here?

A. I have, but I think that could be better brought out at a later time.

Q. All right, proceed.

[fol. 826] Supervisor Cleland: Before you leave that sheet, what was the amount of interest that the Great Northern and the other road paid on their bond issue, the cost of the money?

A. I think I misspoke, but I didn't think about it until you just directed my attention to it. This was a very complicated bond deal in which there were three different rates of interest; the first loan was floated at 6½%; the $230,000,000 was borrowed at 6½% for which the carrier paid 91 1/7, or 7.1 per cent. The figure that I gave you was based on the Great Northern Ry. Company's proportion. The original 6½% bonds carried with them, a conversion privilege. They could be converted into Great Northern 7% bonds, or Northern Pacific 6% bonds. Since that date practically all of the $115,000,000 assignable to the Great Northern Railway Company has been converted into Great Northern 7% bonds, and Great Northern 7% bonds at 91½ gives a figure of 7.65 which I referred to——

Supervisor Cleland: That 7.65 represents the entire cost to the Great Northern of this money?

A. It does not.

Supervisor Cleland: Does that include brokerage fees?

A. It does not. The loan was floated and the carriers received $91.50 per $100 bond, but that does not include many other expenses which the carriers have to bear in furnishing the bonds and lawyer services and innumerable other fees.

[fol. 827] Supervisor Cleland: What I am interested in is the actual cost to the Great Northern——

A. Well, it is strictly 7% bonds at $91.50, producing a cost roughly of 7.65%, now that represents in a way the cost to the Great Northern.

Sup. Cleland: To get the money?

A. To get the money, not including these other items of expense.

Sup. Cleland: What do they amount to? Do they amount to one per cent or one half of one per cent?

A. No I don't suppose they amount to one half of one per cent.

Sup. Cleland: Well, would you say that the Great Northern got this money for 8½ per cent or 8 per cent?

A. Yes I would say it probably would be 7¾ per cent. I just wanted to refer to that 6% *per cent* figure which we are using in our testimony as to the borrowing of a large sum of money; we are paying much in excess of that——

Sup. Cleland: My inquiry was directed not with particular reference to this case but with reference to the same question raised in a number of other cases as to the cost of money?

A. Yes, well that is changing from day to day. You would be surprised at the amount of stamp costs and things like that that you have to pay, it runs into thousands of dollars. I am not sufficiently informed as to that detail, I know they exist and I have seen the vouchers for some of them for large amounts, but I couldn't say [fol. 828] what the total amounts to; I think our people would be glad to give it to you if you desired it.

Mr. Balmer: Are you ready to proceed on page 10?

A. Page 10 is a separation or an assignment of capital charges to the log service for equipment. Here again to be on the safe side we have used only the original cost of the particular equipment used in this movement, and an interest charge of 6%, assigning to the log service its proportion on a mileage basis, that is, each road locomotive of the class used in handling these log trains made an average of nearly 16 thousand dollars per year in 1920, and the valuation at 6% has been assigned to the log service on a pro rated mileage basis: the same with the yard locomotive, the log cars and the caboose. In connection with the log cars it is interesting to note that the assignment amounts to 37 cents per loaded car of logs. At the present time the Great Northern Ry. Company is paying $1.00 per diem for foreign cars in service upon its line. It would hardly be expected that a log train could make a round trip from the woods to the terminal and back to the woods including a proportion of the time when it is in bad order in less than three or four days, which, at the going rate per diem would be three or four dollars instead of 37 cents.

Q. There is a heavy item of expense in connection with this log service for cabooses?

A. Yes, sir, it amounts to 6/10ths of one cent per car; however, [fol. 829] I have just put it in to make this statement.

Page 11 is merely a recapitulation of capital charges per car of logs, adding the road and the equipment together and later multiplying by the total number of cars handled in 1920, and we have an assignment of $80,218, based on the 1920 volume of traffic. Now the only place where 1920 has been used in this analysis has been used in 1920 volume of traffic. Turning to page 1 we have a recapitulation and summary of all the important figures we use on the following sheets. The first item is the revenue from logs from January to August 1920, before the last increase in rates. To this has been applied the 25% for the increase in rates effective August 26th, and adding thereto the revenue of the logs at the advanced

rate—Sptember to December 1920—and the switching and demurrage revenue—a small item from logs—we have the total adjusted revenue on the basis of 1920 volume of traffic as applied to present rates. The next item the operating expenses are the same as shown on the bottom of page 7 where the total operating expenses per car have been reduced to the total operating expense for all cars handled in 1920. This leaves a deficit from railway operation of $51,321. Next, taking out the $36,322 of taxes shown on page 8, we produce a railway operating deficit of $87,643, and finally considering the capital charges shown on page 11 of $80,218 we have a net loss from handling logs in the state of Washington based on the traffic of 1920, with the revenues adjusted to the basis of the increased rates effective August 26th, 1920, and the expenses based on the cost of [fol. 830] handling salted log trains with the reduced wage scale and material costs effective after July 1st, 1921. The deficit indicated is $167,861. Right here is where I would like to compare the capital charges applicable with the basis suggested by Mr. Calderhead yesterday as being what he considered to be the correct and proper method. I have worked out for this same method the capital charges assignable on the basis suggested by Mr. Calderhead, that is, assigning first to freight the proportion of capital charges based on the freight operating expenses, and then assigning to logs its proportion of the freight ton miles on the basis of the gross ton miles and secondly the car miles. I have also worked out a fourth method. Mr. Calderhead said that the capital charges should be separated between freight and passenger on the basis of the operating expenses. I have worked out this fourth method by assigning to logs its proportion of the freight expenses on the basis of the log operating expenses; the log operating expenses however being understated for 1920, as they included consideration of reduction in wages and material made since 1920; the result of these four methods is roughly as follows:

On Mr. Calderhead's suggested basis, using the gross ton miles, the capital charges applicable to logs are $67,000, on the basis of car mile $97,000 and on the basis of the total operating expenses $108,000, compared with $80,000 which we have used.

Q. Now in the three calculations which you have just mentioned the basic capital figure which you use was that shown in Great Northern's exhibit #17 introduced at a previous hearing, as I under- [fol. 831] stand it?

A. As the entire valuation of the Great Northern Ry. Company's lines within the state of Washington, yes.

Q. Have you anything further to offer?

A. No, sir.

Supervisor Spinning: I would like to know what it costs per car, considering the elements the witness has stated, in this 31.3 mile movement, what it cost to move a car—what page is it shown on?

A. For the road movement it is shown on page 3, the last item.

Sup. Spinning: $9.32?

A. Yes, sir.

Sup. Spinning: Does that include capital fees——

A. No, sir. That is the road operating expense of train and engine men.

Sup. Spinning: I want to know what it costs to move that car, including all the elements you have stated.

Mr. Calderhead: $25.23.

Sup. Spinning: Is Mr. Calderhead right?

A. I will not say he is until I have figured it out.

Mr. Calderhead: It is $542,000 divided by 21,483 cars.

A. You mean now including taxes, capital charges and everything?

Sup. Spinning: Yes.

Mr. Balmer: May I have a ruling on the offer of this exhibit?

[fol. 832] The Director: Are there any objections?

Mr. Balmer: This is exhibit #23.

Mr. Henderson: No objections.

The Director: It will be admitted.

(Exhibit admitted and marked Great Northern's exhibit No. 23.)

The Director: We will take a recess for five minutes.

Hearing continued, all parties present as before.

Mr. Turnburke on stand.

(Witness, continuing:) At the time we took a recess the question was asked as to the average cost per car including the proportion of taxes and interest on valuation as developed by this exhibit and as stated by Mr. Calderhead I find this cost to be slightly more than $25.00 per car, slightly more than $25.20 per car revenue, figuring it exactly, but it can be easily ascertained from the figures which have been introduced by adding together the operating expenses shown on page 1, the taxes and the capital charges, and dividing by the total number of cars handled, 21,483.

Mr. Da Ponte: Was that other company that participated in this financing the Northern Pacific?

A. Yes, sir.

Q. And is the interest cost to the Northern Pacific the same as the Great Northern?

A. I stated in my direct testimony that this $230,000,000 loan was first floated on the joint obligation of the Great Northern and the [fol. 833] Northern Pacific at a rate of 6½ per cent. The carriers received $91.50 for each hundred dollars worth of bond issue. Dividing the 6½% by the principal received of $91.50 gives 7.1% interest rate which was assumed by both the Great Northern and the Northern Pacific.

Mr. Da Ponte: Now the Northern Pacific had to assume one-half of that $230,000,000 and the Great Northern——

A. Yes, that 7.1%.

Mr. Da Ponte: And the additional charge to the Great Northern was because of this conversion privilege?

A. Yes.

Mr. Da Ponte: Do you know whether or not the Northern Pacific had a similar provision or not?

A. Yes, sir, it did.

Mr. Da Ponte: So then the cost was the same to the Northern Pacific due to the conversion privilege as the Great Northern?

A. No, sir, the conversation privilege to the Northern Pacific—the bonds as originally issued were 6½% bonds convertible at the option of the purchaser into Great Northern 7's or Northern Pacific 6's up to one half of the bond issue. At the present time practically all of the bonds have been converted into Great Northern 7's and very few into Northern Pacific 6's.

Mr. Da Ponte: That is, because the joint bonds bore as good a rate of interest as the Northern Pacific 6's?

A. Yes, sir, so that the Northern Pacific is 7.1 per cent and the [fol. 834] Great Northern a little higher.

Mr. Da Ponte: That is all.

Cross-examination.

Mr. Henderson:

Q. That was the refunding issue?

A. Yes sir.

Q. Now referring to your exhibit 23—your figures in exhibit #23 are based upon a solid log train movement?

A. Yes sir.

Q. And you take the movement of August, September, October and November in order to get your unit cost for the solid log train movement, is that right?

A. The methods selected were simply to determine some actual train movement of solid logs, and August, September, October and November were taken because those were the months in which the heavy volume of log shipments was encountered, and therefore most likely to find the solid log movements.

Q. Now if these logs had not moved in solid trains, but if on the contrary you hauled 25 loads of logs and an equivalent amount of some other merchandise would that have any effect on these figures?

A. Yes sir.

Q. What do you know as to whether or not these logs in these particular months did move in exclusive log trains?

A. I know that these particular movements which I have selected [fol. 835] were exclusive log movements.

Q. That is, particular movements?

A. Yes sir.

Q. But I mean the general run of business there, do you know what the practice is as to the running, that general run of log movement?

A. The practise is—the train is put on to handle logs, if there is any other freight to be moved it is handled. It has been handled previous to this year. At the present time under a little different

operating situation it would be practically impossible to handle any other cars except logs in those trains.

Q. That is on the Gold Bar movement at the present time?

A. Yes sir.

Q. However, prior to the present time both on the Gold Bar and the Sultan movement you handled many other cars of merchandise?

A. I wouldn't say, I know we handled some; we are dealing with the present time. We are taking present time rates and costs and present time operating conditions.

Q. Turning to page 2, where you have cost of fuel oil $2.169, is that the present cost of fuel oil—as a matter of fact it is only $1.80 now isn't it?

A. It is not, it is $2.169.

Q. How does it come then you pay so much more than the loggers pay for their fuel oil?

A. I don't know as to that, I know that is the cost to the Great Northern delivered on its tenders.

[fol. 836] Q. Have you a contract with the Standard Oil Company for delivery of oil at $1.86?

A. I say this is the cost of oil delivered on its tenders.

Q. Now to get that figure which you took, the cost that you pay the Standard Oil people, you add to that in order to get this cost of $2.161——

A. No sir, that is the cost delivered to the Great Northern on its tenders.

Q. How is that cost made up?

A. That cost is made up by the cost of oil and the cost of putting the oil in the tenders.

Q. What does it cost you to put it on the docks?

A. I don't know.

Q. Then where do you get these figures if you don't know?

A. I got those from the records that we keep.

Q. Do you know how they are made up?

A. I told you how they were made up.

Q. Do you know the cost of the fuel before it is delivered on your tender?

A. I said I didn't know.

Q. Turning now to this same exhibit——

A. I just want to make clear there is no especial charge or figure introduced their for delivery charge, it is the actual cost delivered on our tenders.

Q. But what I want to get at is how do you figure that cost?

[fol. 837] A. We figured it by taking the wages of the tank men unloading the oil into the tanks and putting it in shape so that it can be delivered on our tenders, that is the cost to us on our tenders, including the handling of that oil.

Q. Now in this exhibit you have put in locomotive repairs and capital account and wages of men and everything to make up your log chart, but when you get to this particular charge there doesn't

seem to be any analysis of why that fuel oil costs you $2.17 per barrel?

A. My dear man—locomotive repairs, there is no analysis there of labor and material. I couldn't say how much it would cost to put a wheel on a brake beam; I say that as a statistician that those are records of the costs as included in the accounts prescribed by the Interstate Commerce Commission; fuel for train locomotives includes the cost delivered on the tenders as will be shown by the accounts of the Interstate Commerce Commission as introduced by Mr. Da Ponte yesterday.

Q. And that is all you know about that?

A. I think that is enough.

Q. I want to know if that is all you know about it, what you took from the records. Now taking the same exhibit and turning to page four where you have analized a certain amount of wages, I think I understood you to say that next to wages the fuel item was the heaviest item of cost in this transportation, that is correct is it?

A. No sir, I didn't say that. I said that fuel was the heaviest [fol. 838] item of material which the railroad company has to encounter.

Q. What is the heaviest element of cost of this transportation, isn't it wages?

A. Yes.

Q. And I will ask you as a statistician of the Great Northern Railway Company if it is not a fact that a very large per cent of your excessive wage charges are not due to the rules and regulations governing the manner in which your employes work?

Supervisor Cleland: What do you mean by that Mr. Henderson:

Mr. Henderson: I mean that the cost of loading these trains and all the yard crews and everything else is due to the fact that the carriers and employes have agreed upon certain working conditions, certain men are to do certain things, and certain other men don't do certain things, and when they get a logging train down to Everett some different employe has to take hold of it until the wages has actually been run up by the rules and regulations governing the manner of their work perhaps more than the actual dollars and cents they are paid per hour——

Mr. Da Ponte: Well, Mr. Gompers ought to be appointed to this study——

Mr. Henderson: I want to know if it is not a fact that the working conditions agreed upon by the employer and employee have not developed to a large extent the excessive wage charges. I think I have a right to show that because if that is true we are not charge-[fol. 839] able with that.

Mr. Dudley: I will object to the question as incompetent and immaterial. The act of congress at the present time takes the question of rules and wages out of the hands of the railroad company and places it in the hands of the labor board, and all those things are now controlled by act of congress, and the railroad company has practically nothing to say about it.

Mr. Henderson: The Interstate Commerce Commission has just

said that the carriers should ask the labor board to correct some of these things that they are complaining about.

Mr. Da Ponte: Let's see the decision.

Mr. Henderson: I will refer you to it, I am not going to introduce it into the records, but on that argument anyhow if as has been said the agreement or agreements that have been entered into between the employer and the employee produces an excessive wage charge then our contentions may be that that expensive wage charge which goes into the making of an excessive cost cannot be charged in the rate, at least until some effort has been made to bring about a reasonable wage change; and I think it has been announced by the wage board, and it is certainly contended by the carrier that the rules and regulations are piling up their wage question to such an extent that it makes it excessive and certain it is that those agreements were entered into between the employer and the employee and not the correspondent——

[fol. 840] Mr. Da Ponte: The United States Administration made the rule and turned the railroads back with these cans tied to them in the shape of rules, and it has created a labor board which was supposed at least to give us relief and they have refused to give any relief, and if you take the announcement in the paper that Mr. Henderson is talking about they say they won't give us any relief for a year. Now whether that is a year or ten years nobody knows. What is the use in cutting up this inquiry with Interstate Commerce Commission's decisions and the decisions of the Labor Board or some other body and they won't take any action. It is something Mr. Henderson got out of some newspaper—it is all more talk.

The Director: We will allow the witness if he can.

Question repeated as follows:

Mr. Henderson:

Q. I want to know if it is not a fact that the working conditions agreed upon by the employer and employee have not developed to a large extent the excessive wage charges. I think I have a right to show that because if that is true we are not chargeable with them.

A. The figures in this exhibit are to show the cost to the Great Northern Railway Company, and to present operating conditions, and they do show that cost.

Q. And you are statistician for the company and have been for the railroad administration? Now it seems to me you as a statistician—let me ask you this, as a statistician is it not a fact that these costs which you have shown here are materially effected and are high by [fol. 841] reason of the working rules existing between the employer and the employee of the railroad?

Mr. Da Ponte: That is an operating question.

Mr. Henderson: That is a question for a statistician.

Mr. Da Ponte: I think that is a question for the superintendent, but let him go ahead and answer it.

Mr. Balmer: I am willing that he shall answer it.

Question repeated:

Q. And you are statistician for the company and have been for the railroad administration? Now it seems to me you as a statistician—let me ask you this, as a statistician is it not a fact that these costs which you have shown here are materially effected and are high by reason of the working rules existing between the employer and the employee of the railroad?

A. It goes without saying that they are affected by any rules existing between the railroad and its employees. That they are unduly high is another matter, and one of which I cannot say. These rates of wages were largely entered into by the United States Railroad Administration, and according to the testimony of its operating officials more efficient and better results have been obtained from the men under these wages and working conditions now in effect than obtained prior to that time.

Mr. Henderson: What do you mean, do you mean that you are getting more efficiency now than you did before out of the conditions and wages imposed by the railroad administration.

[fol. 842] A. I say that is the testimony of the railroad officials who put these wages and working conditions in effect.

Q. Did the railroad administration put these in effect with reference to working conditions?

A. Yes, largely.

Q. And mileage basis and the division of work between yard men and brakemen and men of the kind that handle the traffic, that they wouldn't do switching and those kind of things were put in by the railroad administration?

A. We are talking about different things; I am talking about the general wage situation.

Q. You are talking about a particular movement?

A. I cannot say as regards the particular movement to which you refer who put those rules and working conditions in effect. I do know that the railroad administration standardized the rules and working conditions and have added thereto and changed them and put them in effect on all roads in the United States.

Q. However, the question I am trying to get answered is whether or not these rules and working conditions that exist do not materially effect the high labor cost that enters into the movement of traffic on the Great Northern?

A. I said that they materially affect them. I also said that I do not know that they unduly inflated the cost if that is what you are talking about.

Q. That is what I am talking about. I thought you understood. [fol. 843] Now is it your opinion that they do not unduly inflate the labor charge in the movement of the traffic?

Mr. Da Ponte: Objected to as not proper cross examination. He said he didn't know.

A. I said I didn't know.

Mr. Henderson: He didn't say that.

A. Well, I say it now.

Mr. Henderson: As a statistician you have never made a study of it?

A. No sir.

Q. What is your duty as a statistician, just to collect figures, or is it your duty to study and analize the cost charges and labor charges that enter into the cost of the transportation on the Great Northern?

A. You have largely stated it in your own latter definition.

Q. Did you study those things that enter into the labor and other costs, as a statistician?

A. Yes sir.

Q. And as such statistician you have never made any study of the effect of the working rules upon the labor costs transportation?

A. I didn't say.

Q. Well have you ever made any such study?

A. Yes sir.

Q. After having made that study, do you know—say if you do not know, whether or not the working rules materially inflate the labor charge in transportation on railroad?

[fol. 844] A. I said that I didn't know that any other rules or set of rules that could be agreed upon between the men and the carriers would result in any different results.

Q. I just asked you if it inflates, and he said he doesn't know of any other rules that they could agree upon——

Mr. Dudley: I think the witness said they did affect it.

A. You are roaming into a realm of conjecture. I know what it costs the company to operate, but you say "any other rules"; why you could assume that you didn't pay a man anything, it would cost you nothing——

Mr. Henderson: That is not one of the rules, I am talking about the rules of operation.

A. What do you mean by "any other rules"? You define and bring in here a set of rules and I will go over it and tell you whether the cost will be cheaper under those rules than under the present one.

Q. You have a present set of rules with which you are familiar?

A. Yes, sir.

Q. Then tell us whether or not the set of rules, or a set of rules could be adopted that would materially reduce the labor charge without reducing the days' wages.

Mr. Balmer: This is making undue burden on our time. I thought the loggers were in haste.

Mr. Henderson: But you know it is a contention of the Great Northern Ry. Co. by which you are employed do you not, or do you, [fol. 845] that they are contending today before various regulatory

bodies and before the public that it is the rules and working conditions that make their working charge so excessively high?

A. I do not know.

Q. You do not know that they are making that contention?

A. No, sir.

Q. Do you know that they are not making it?

A. I do not.

Q. You have had nothing to do with any investigations in regard to that kind of contention?

A. No, sir.

Q. You have been testifying that many of these things and figures were made up according to the rules of the Interstate Commerce Commission, I assume from that that you keep yourself informed on the rules of the Interstate Commerce Commission?

A. Yes, sir.

Q. Now going down to your division of taxes which I think is on page 8.

A. Yes, sir.

Q. You divided that on the gross revenue basis, did you?

A. Yes, sir.

Q. That is, you broke it down for the log traffic and the freight traffic on the gross revenue basis?

A. Yes, sir.

Q. And you used that gross revenue for the year 1920?

A. Yes, sir.

[fol. 846]. Q. This is the largest gross revenue you have ever had in the history of logging?

A. Yes, sir.

Q. And therefore would give you a larger percentage of taxes for 1920 than if you used the revenue of 1921?

A. No, sir.

Q. You think that the percentage of gross revenue from log traffic in 1920 is not larger compared with the entire gross revenue than the percentage in 1920 would be?

A. I didn't say that.

Q. Well if the percentage was larger it would give you a larger percentage of taxes than it would this year?

A. A larger percentage in absolute volume not larger percentage in cost per car, a smaller amount in cost per car.

Q. If you use the 1921 figures for cost per car it would, but if you use the gross revenue in 1921 and the amount of the gross in 1921, then what would be the result?

A. If you use sheep and goats you would get something else.

Q. That is what you have done, used sheep and goats?

A. No, sir.

Q. You used here in 1921——

A. I used it no place except on the taxes.

Q. Now going down to maintenance of way and structure what year did you use?

A. I used 1921 costs.

Q. What did you use in your segregation of values, a sheep or a

goat, 1921 or 1920, didn't you use 1921 figures for your segregation [fol. 847] of value?

A. No, sir—I beg your pardon, yes.

Q. So that in your segregation of values for valuation you used 1921 and when you get the taxes you use 1920, is that true, that is correct isn't it?

A. I think I testified at length as to different bases suggested for a division of capital charges based on the 1920 costs in which I used —in which I showed that on four different bases, two of which were proposed by Mr. Calderhead, the capital charges would have been $67,000 on the gross ton mile basis, $90,000 on the car mile basis, and on the basis which I suggested might have been used $108,000 on the total operating expense basis compared with the $80,000 which we have used. All of those figures are based on the volume of traffic in 1920. I think Mr. Henderson you are confused in two things, one is the cost and the other is the volume of traffic. I have used the volume of traffic for 1920 as being the one in which there was a large volume of traffic and consequently a small assignment to logs, and the cost for 1921 as being a low cost and consequently a low assignment to logs.

Q. Now taking the months July, August and September for 1921, wherein on page 9 you get the average daily train movements?

A. Yes.

Q. Had those three months been a particularly heavy movement your average would have been a large average wouldn't it?

A. I testified as to what it would have been had I used the actual [fol. 848] figures in 1920, they would have been $90,000 under the car mile basis, $67,000 on the gross ton mile and $108,000 on the total operating expenses.

Q. I am not asking you about that, I am asking about this page 9, I want to know if you used a period of months in which if you had included the period of three or four months when there was no traffic, would you have got the average shown on page 9——

A. Yes.

Q. And that average would have reduced that figure to $3.04?

A. No, sir, it would have increased it.

Q. It would have increased it if you had used a less average train movement?

A. Yes.

Q. And then if you had a greater train movement it would have reduced the figure?

A. Yes, sir.

Q. And the logging camps were shut down in July, August and September 1921, weren't they?

A. They were not.

Q. Did you compare the movements in July, August and September 1921 with the same movements in 1920?

A. No, sir.

Q. Had the movements been very materially larger in 1920 your average train movement then would have been greater and that would have reduced that figure of $3.04?

[fol. 849] A. Yes, I have however stated that it would have been had we had in 1920—when you say they had so much more movement—I have shown that figure would have been $108,000 instead of $80,000. I have used that total operating expense of $67,000 on Mr. Calderhead's gross ton mile basis, and $90,000 on the car mile basis.

Q. Yes, but what you told me was that the figure of $13.05 would have been on the 1920 movement if you don't know what that figure would have been, how can you tell what is the result of your calculation—how can you tell what the result of your calculation would have been had you used that?

A. I didn't tell you what the result of my calculation would have been had I used the 1920 figures. I told you the result would have been what it would have been had I used Mr. Calderhead's basis, which is not the basis of the trains.

Mr. Henderson: That is all.

Mr. Clifford: The question was—what is the relation of maintenance expense to the total expense expressed in a percentage.

A. Roughly 20%.

Q. Now you get your figures from page 6, do you get your percentage from page 6?

A. I didn't get it from there but I presume you can get it from there.

Q. What percentage is shown from that?

A. 25.8, roughly.

[fol. 850] Q. Now my figures don't quite check with that?

A. I beg your pardon——

Q. The first three items—just figure that over again and see if we do not come more nearly close together.

A. What do you want figured?

Q. I am assuming that the maintenance of way expense on page 6, steam locomotive repairs, the 2nd item, and freight train car repairs, the 3rd item, are all properly maintenance charges with some element of depreciation in them?

A. No, sir, no element of depreciation.

Q. Well, by that I mean that under the Interstate Commerce Commission's classification depreciation is included in maintenance expense on certain items, isn't that a fact, car trucks and car bodies—the depreciation is set out separately, but all other depreciation is included?

A. Well, that is a fact—that is the effect of the accounting, yes. To that effect depreciation is excluded. There is no account for depreciation included, no reserve set up on the books included in those figures.

Q. Exactly. But now those first three items I have referred to, are they not maintenance with some depreciation included?

A. Yes.

Q. And what relation do they bear to the total of the items shown on that page?

A. I beg your pardon, I gave you the relation of the maintenance of way to the total.

Q. Yes.

A. They are approximately 37%.

[fol. 851] Q. Any difference, either up or down in that charge, in those three items would make a substantial difference in the rate of return or the loss, would it not?

A. Any substantial difference up or down, yes.

Q. Because of the size of these three accounts. Isn't it a fact that during the period of Federal control that maintenance charges have been abnormally heavy?

A. No sir.

Q. I call your attention to some figures taken from the annual report made by the Great Northern Railway Company to the Public Service Commission and to the Department of Public Works of the state of Washington, and I want to state to you that those reports show that in 1917 maintenance of way and structure was approximately $2,046,000, in 1918 approximately $2,918,000, in 1919 approximately $3,304,000, in 1920 approximately $4,555,000. Now taking the account maintenance of equipment and comparing the four years and taking the figures from the same report maintenance of equipment in 1917, was approximately $1,572,000, in 1918 approximately $2,777,000, in 1919 approximately $2,846,000 and in 1920 approximately $3,756,000. Now I ask you if that showing on those figures would change your statement with regard to the normality or abnormality of certain maintenance expenditures?

A. No sir.

Q. How do you account for the continued and large increase of those maintenance items over a period of four years?

[fol. 852] A. Increase in wages and increase in cost of materials.

Q. Would that account for increase in maintenance of way and structure between the years 1917 and 1920 of more than 100 per cent?

A. All together likely, yes.

Q. What, expressed in percentage, was the wage increase on the wages of employes performing maintenance work in that period?

A. I do not know. You can get them out of the same record as you got these figures from.

Q. Yes I know that, but that is why I am asking you the question?

A. If you will bring me the book I will tell you.

Q. Do you make the same remark about maintenance of equipment over the four years?

A. Yes sir.

Q. That is, it is entirely accounted for by the difference of cost of labor and equipment over these four years?

A. I didn't use that word "entirely."

Q. To what extent would you say that difference in cost of labor and material accounts for it?

A. I couldn't say.

Q. Would you say that it accounts for 50 per cent of it?
A. I couldn't say.
Q. Would you make any statement about that?
A. No sir.
Q. Then I misunderstood you because I understood you to say [fol. 853] that that difference was accounted for by the difference in the cost of material and labor?
A. I said largely.
Q. What do you mean by largely? Can you express that in per cent, just approximately? What is your opinion about the matter?

Mr. Da Ponte: If you have those reports introduced them, they will show.
Mr. Clifford: Please repeat that question.

Question repeated as follows:

Q. What do you mean by largely? Can you express that in per cent, just approximately, what is your opinion about the matter?
A. I am not in a position to testify in detail as to answers to these questions unless I have the record, if you will produce the record you have in your office I will endeavor to answer to the best of my knowledge and belief.
Q. Then will you furnish before the conclusion of this case the showing in terms of percentage of the portion of the increase that we have called your attention to in charges for maintenance of way and structures and maintenance of equipment which can be attributed to increase in cost of labor and material?

Mr. Balmer: Will you give him the book?
Mr. Clifford: I will furnish that.
A. You cannot get that from the annual reports. You were talking about labor charges and now you are talking about labor and [fol. 854] material.
Mr. Clifford: All right we will reduce it to labor, will you produce that for labor?
A. I will furnish you with the approximate figures.
Q. I will furnish you with a report.
A. Just a minute, I would like to ask you however why you refer to steam locomotive repairs and freight train car repairs, as the costs covered in here are not on the basis of 1920 costs and instead of 37% of the total maintenance to which you refer, the proportion of maintenance of way is only 20%. Now all costs used in here in July and August 1921, not 1920, and if 1920 cost of steam locomotive repairs had been used the cost would have been much in excess of what it is.
Mr. Clifford: Well, I am calling your attention to the result of the four years.
A. Yes.
Q. Which I reflected in a great many of your figures?
A. No the results for maintenance and equipment are not reflected in any of my figures.

Q. Do you know whether or not there has been a settlement made with the government by the Great Northern Ry. Company for the failure to earn the guaranteed return during the period of the war?

A. There has been none.

Mr. Balmer: Object to that as incompetent, irrelevant and immaterial, just what is the purpose of this question?

[fol. 855] Mr. Clifford: Then you have made no allowance in your revenue statement for such a settlement.

Mr. Balmer: Objected to as incompetent, irrelavant and immaterial. It is notorious.

Mr. Clifford: As a statistician would he not have included it?

Mr. Balmer: If he knows it or not it is incompetent, irrelevant and immaterial. It is notorious that these settlements were based on appraisements of a number of years ago.

Mr. Clifford: They are a very real item of revenue however.

The Director: Well, he has practically answered the question.

Mr. Da Ponte: Do you want to give the loggers credit for the deficit the government made up?

Mr. Clifford: No. I want to get the entire revenue from any of these sources. I want to find out what it includes. Now can you say Mr. Turnburke what is the volume of movement of logs on your line compared with the total traffic?

A. For what period?

Q. Just generally, I want to know whether it is large in comparison to the total or small.

A. It is different for different periods.

Q. Well, is it one of your principal movements, or is it a minor movement?

[fol. 856] A. Are you talking about the Great Northern Ry. Company or the state of Washington?

Q. I am speaking about the state of Washington, the total traffic, that moves in the state of Washington and the total log traffic that you move in the state of Washington.

A. What is your definition of large, you asked me for a percentage awhile ago.

Q. I am not asking you for a percentage. I am asking you to state whether your log traffic is a substantial part of your total traffic?

A. What is substantial?

Q. Is it 10 per cent of your total traffic?

Mr. Da Ponte: Object to that because those figures are in the records by exhibit.

Mr. Balmer: Let him go ahead, he can answer it.

Mr. Clifford: We will get it probably while you are objecting.

Mr. Da Ponte: You have it already.

A. Yes, it is about 12½ per cent.

The Director: We will adjourn to 1.30 this afternoon.

[fol. 857] October 26, 1921—1.30 p. m.

Met pursuant to adjournment afternoon recess.

The Witness: Will you read me my last answer.

(Last answer read by the reporter.)

The Witness: Add "based on the tons."

Q. You can now state such further answer as you have to make on the subject of maintenance.

A. At the last session Mr. Clifford read into the record certain figures showing comparison of maintenance of way and structure expenses, maintenance of equipment expenses 1917 to 1920 for the State of Washington. I told him I would see what I could do towards comparing the percentage of increase shown in the report with the increase of wages and material, it evidently being the idea to develop that 1920 was a year of normal maintenance. Unfortunately the records as filed with the Public Service Commission do not disclose the information desired for the State, but they do show general information for the system, and my reason for this morning for telling Mr. Clifford I could not definitely answer him as regards the State was that my knowledge is confined to the system's operation.

I took from the records filed with the Public Service Commission the figures for 1917 and 1920, as those are the first and last used in Mr. Clifford's comparison, to show the biggest increase.

Under the item of Labor for maintenance of way and structures, the biggest single item as regards amount of service performed is an account called Section men, shown in statements of employees, and their compensation as regularly reported under Interstate Commerce [fol. 858] Commission rules. One half the time, time as measured by number of hours of service for section men, is much in excess of the time of service of any other class of employees, being more than double as great as that of the next highest class. In 1917, hours of service for section men was 18,414,829, and in 1920 18,583,131, approximately the same. The increase is 170,000 hours, or less than one per cent. The average rate paid the section men in 1917 was 22.4 cents per hour, and in 1920 48.5 cents per hour, an increase of 116% in the wages of these men.

As regards the material, the rails show considerable increase applied in 1920. The Switch and bridge ties, a small increase and the other ties a decrease. The item of rails, which as I said, shows an increase, was from 23,000 tons in round figures, to 52,000 tons in the rail account, but the total charges for last year, 1920, were only $81,000 which is about two per cent of the total charges to maintenance of way and structures, so you see a substantial increase in that account has very little effect on the general figures, of increase.

Coming to ties, which is a big item of expense, the ties amounting to over four times as much as the rails; number of ties applied in 1917, 2,558,652, compared with 2,264,830, in 1920, a decrease of something like ten per cent.

As far as equipment is concerned, there is no information shown in this record as regards material; there are so many different classes of

material applied in equipment that no reports have ever been made [fol. 859] to the Commission; there is, however, the same items of expense of labor shown as were shown for section men.

The two big items under equipment as regards labor are under steam locomotive repairs, machinists, and under freight train car repairs, carpenters. I have selected these two accounts as being representative; the other items are small and would not affect the average.

In 1917 the total hours for machinists were 2,720,964, and in 1920 2,539,927, a decrease of three or four per cent. For carpenters the figures for 1917 were 3,573,272, and in 1920, 3,646,327, an increase of two per cent. The total for machinists, and carpenters for 1917 is 6,294,230 hours, compared with 1920, 6,186,254. Thus you see, comparing 1917 with 1920, as far as maintenance of way was concerned under Section men you have a slight increase in hours amounting to about one per cent; a decrease in the number of ties applied of ten per cent, an increase in the numbers of tons of rails laid, which however is an item of small amount as regards the total of maintenance of way and structures expenses, and a decrease of total hours machinists and carpenters if between one and two per cent.

These figures would seem to indicate that 1920 as regards the amount of work done was approximately the same as 1917, and that therefore the increase of cost which you have referred to are due entirely to changes in wages and material costs.

Mr. Calderhead: In making up this Exhibit No. 23, did you find any particular part of operating expenses affecting the movement of logs that did not apply to other traffic?

[fol. 860] A. What do you mean?

Mr. Calderhead: Was there any particular item of expense in connection with the movement of logs that would not apply to movement of lumber, for instance.

A. I can not think of any, if there is any.

Mr. Calderhead: So that the operating expense covering the movement of logs would be approximately the same as for handling any other traffic that moves in large volume?

A. Yes, sir, I would say so.

Mr. Calderhead: You noticed that the operating expenses were rather high for loaded car mile, did you not?

A. No, sir, I did not notice that.

Mr. Calderhead: The annual report of the Great Northern Railway, for instance, shows that the total revenue on their entire line was about one third of the operating expense that you have figured as applying to the movement of logs.

A. All right, sir.

Mr. Calderhead: Have you any explanation of that?

A. I do not think it needs any. You are talking about averages for the system. I have a statement in which there are no averages involved. This is actual out of pocket cost for this particular movement. There has been more or less talk by different witnesses as to the merits of this, that, or the other average method of applying costs.

There is no average cost in this respect to the principal items of expense and a comparison between the actual out of pocket cost for the log movement in the State of Washington and the average cost on some other basis for the system—is that what you referred to?

[fol. 861] Mr. Calderhead: I was using average revenue not average cost.

A. You are referring cost to revenue?

Mr. Calderhead: I was calling attention to the fact that the operating expenses per loaded car mile on logs is three times as great according to your figures, as the average revenue from all traffic received by the Great Northern Railway on its entire system. Is there any explanation that would appeal to you as covering that situation?

A. The only explanation is that that is the facts.

Mr. Calderhead: You did not go into any other traffic to ascertain the cost of moving any other traffic, so that when you totaled it you would find whether that approximated the actual operating cost?

A. No, I did not go over any other traffic. I know as a general situation, that the average revenue for the system is greatly affected by the large volume of iron ore tonnage handled by the Great Northern Railway. In the year 1920, of the total tonnage handled by that company as shown in its annual report to the Commission, a total of 32,948,292 tons, handled, 14,755,241, or slightly less than half, was iron ore handled in the State of Minnesota.

Mr. Calderhead: Did you ascertain the cost, ever estimate the cost, of moving iron ore in the same manner you ascertained the cost of moving logs in this state?

A. I cannot say that I have, no.

Mr. Calderhead: You do not know then just what it is?

The average cost of moving a loaded car mile is just as great?

A. My judgment would be it would not be as great.

Mr. Calderhead: What would you base that on?

[fol. 862] A. On the basis of the fact that iron ore is handled in a volume—if you have seen fifteen million tons as compared with some three hundred thousand tons of *l*igs—and the 300,000 tons of logs were handled from different originating points to different destinations all over the State of Washington, while the iron originates at one place and terminates at one place, and the average trainload of iron ore will run from six to eight times as much as the average train load of logs.

Mr. Calderhead: The basis upon which you figure your cost of handling logs was not from all over the State of Washington, but between Gold Bar and Everett, so that this case is actually figured for a distance of 33 miles, including the two mile haul from Gold Bar to the switch, and the empty car movement is practically the same, an empty car for every loaded car?

A. Yes, sir.

Mr. Calderhead: What is the distance you haul that ore?

A. A hundred and one miles.

Mr. Calderhead: Three times as great?

A. Yes, sir.

Mr. Calderhead: So making an allowance for three times as great

a haul itself, there should be some difference in your operating cost. What is your rate on ore?

A. One dollar.

Mr. Calderhead: Per ton?

A. Yes, sir, per gross ton of 2,240 pounds.

You have brought it out and I want to follow it up by saying that this movement, this cost, reports the movement simply from Gold Bar to the terminals at Everett, which is approximately the same as [fol. 863] the average for the State.

Q. The average in the State?

A. Average of logs in the State.

Mr. Calderhead: Oh, logs, yes sir.

A. We are talking about logs. I would call your attention to the fact in that connection, from exhibits previously introduced, that the movement from Gold Bar to Everett is absolutely the largest movement that the Great Northern Railway Company has in the State, as regards number of carloads handled. In other words, not only is this movement typical of the average of the State, but it is absolutely as regards volume, far ahead of the movement handled between any other two destinations. Furthermore, that the other movement in connection with this same train, that is, over the same tracks, from Sultan Junction, is the second highest movement in the State as regards the number of cars.

The remaining items are mostly scattered cars between various destinations, where there are relatively few cars.

The cost of handling these logs between these destinations would be in my estimation in excess of the cost we have taken here, for the reason many of them are handled in local trains. The cost of trains, in this kind of service, in local trains exceeds the cost in through trains. The number of cars in a train is less than in these solid trains of logs, therefore increasing the enumerator by the increased cost in wages, and decreasing the divisor by the decreased number of cars, and the cost per car would be much in excess of that shown here.

[fol. 864] Mr. Calderhead: If we make allowances for the greater average length of haul of all your business within the State of Washington the same figures you have applied to find the cost of movement of logs could be applied to other traffic?

A. If you take each movement in the State of Washington and analyze it as I have done for the logs, you will get an expense which, added together, would be the total operating expense for the State.

Mr. Calderhead: Which would be in excess of the revenue which you derive in this State?

A. I am not in a position to say.

Mr. Calderhead: That is a fact, according to reports of the company made to the commission?

A. Yes, sir.

Mr. Calderhead: The Great Northern Railway is not earning the expenses that you have enumerated here?

A. Yes, sir.

By Mr. Balmer:

Q. Did I understand you to say that there were no elements of expense in the handling of logs that would not be equally applicable to the handling of other commodities of—such as lumber?

A. Well, I said none that I thought of at that time.

Mr. Calderhead: He said that nothing occurred to him. I assumed that the term of maintenance of equipment would be one that would be taken into consideration, and the difference between average receipts and expenses is sufficient to allow a good considerable lee-way.

A. I had in mind maintenance of equipment as regards car re-
[fol. 865] pairs, to be in excess, but I understood the question to be concerning fences, *show*-sheds, wharves and docks, which apply to other movements on which logs are not concerned, and allowance for which has been made in Exhibit 23.

Mr. Calderhead: In other words, that is an allowance that you would probably make in maintenance of equipment?

A. I would not say that without making a study.

Mr. Calderhead: You would take that into consideration; you have eliminated snow-fences, and some other features from your calculations?

A. Yes, sir.

Q. That would apply to other traffic, probably?

A. Yes, sir, some other traffic. Not all of it. That handled east of the mountains.

By Mr. Balmer: Did you intend, in answering Mr. Calderhead, to indicate that the cost per car mile or gross ton mile, of handling logs for short hauls averaged thirty miles on the Great Northern in this state, would be equal to the similar average cost of handling I have made here, that when he had these costs obtained from these

A. I do not believe I said that and I did not intend that I should say that. I said that if he would make an analysis of the costs of handling these other commodities similar to the cost analysis which I have made here, that when he had these costs obtained from these other commodities, added to these costs, he should get the cost which would equal the total cost in the state. I said nothing about car miles cost in any way in which you could make allowance for it by any method of averages, by doubling the miles or doubling the cost, or any other calculation. I know of no way of getting the cost for
[fol. 866] any traffic that is at all defendable and accurate which has not been taken care of in my analysis, in Exhibit 23.

Mr. Calderhead: In the operating expenses in the State of Washington, all of the operating expenses accruing on the divisions in the State of Washington are charged to it?

A. Yes, sir.

Mr. Balmer: You do know that the operating expenses of a railroad having a suitable proportion of branch lines mileage to main line mileage will be heavier than where that condition does not exist?

A. Yes, sir.

Q. So that proportionately the operating cost expenses would be heavier then in the State of Washington than in Montana on your line?

A. I do not know the proportion of track of main and branch lines in these two states as——

Q. You know that Washington produces a tremendous amount of timber and lumber movement through the State of Montana, and that there are no terminal expenses there, but it is all borne by terminals in this state?

A. It is not producing any tremendous volume right now; I know that.

Mr. Calderhead: Possibly rates might have something to do with that.

A. I do not think so.

By Mr. Da Ponte: This study was on the main line?

A. Yes, sir.

Q. Therefore the costs thus shown would be unduly favorable, compared to average cost?

[fol. 867] A. Yes, sir.

Q. A large percentage of your log movement was on branch lines?

A. Yes, sir.

Q. Considering the other factors you mentioned, upon the whole, does not that study show as low a cost as you could find for any operation, or much lower, I will say, than the average operation in this State?

The Director: Are you talking about operations he knows about or operations on your line—he don't pretend to know about.

Mr Carey: I submit the witness has not undertaken to qualify himself upon lines in this State as a whole, but he has confined himself wholly to Great Northern operations.

By Mr. Da Ponte: I refer to the Great Northern, with which he is familiar.

Objection overruled.

Q. Does this operation on the main line with these comparatively large loads—does the cost stated there compare—make a better showing for the log traffic than the average operation on the Great Northern, in logging operations?

A. It does as regards average logging operations, but I would not say that it would as regards other traffic in the State.

Q. I am talking about logs?

A. That is a very favorable example.

Q. Along all lines of logging operations on the Great Northern?

A. I have tried to select it with that in view.

Q. Do you know anything about the Northern Pacific logging operations?

A. No, sir, nothing.

[fol. 868] By Mr. Carey: Turn to page 17 of your exhibit.

A. Yes, sir.

Q. You have a figure of $19.81 per car. That is the direct operating expense to move a car, Gold Bar to Everett, and does not include any overhead of capital charges?

A. It includes everything included in the classification of operating expenses as prescribed by the Interstate Commerce Commission.

Q. That would exclude capital charges?

A. It excludes capital charges, yes, sir.

Q. I think you gave Mr. Calderhead a figure of $25.20 per car for the same movement, covering all charges, which would include this $19.81, plus capital charges and taxes and these other?

A. Yes, sir.

Q. So as nearly as you can compute, $25.20 is the actual cost to the Great Northern Railway Company of transporting a car of logs Gold Bar to Everett?

A. It represents the average cost of handling a car of logs from Gold Bar to Everett, including the movement in the Everett terminals, and including an allowance for capital charges and taxes.

Q. On the basis of 7,000 per car, that would make $3.60 a thousand.

A. $3.60.

Q. As I understand your testimony, you are not expressing any opinion as to whether as a practical matter it would be advisable to charge $3.60 as a rate on the movement of that commodity that distance?

A. You are right.

Q. That is, you are not expressing any opinion on that?

A. Yes, sir.

[fol. 869] Q. You are giving these figures to the Commission as a statistical matter absolutely for what consideration the Commission may think they may have, bearing upon what the rate will be.

A. This is simply a cost analysis showing the results to the Great Northern Railway Company from operating this business.

Q. And you have no opinion as to the expediency of undertaking to impose such a charge upon the log traffic?

By Mr. Balmer: He was not offered as a witness to cover that.

By Mr. Carey: With that understanding, we close that feature.

Q. As I understand it, you have computed these costs as nearly as you can? I have no quarrel with your method of computation; I do not say they are wrong or right, because I do not know, but as I understand it, you actually have undertaken to arrive at the cost as nearly as you can, as of July of this year?

A. No.

Q. What was the point of time you assumed for the purpose of your computation?

A. I assumed the wage scales and material costs that have been in effect for the period since the first of July, as shown on the totals sheet of this exhibit. I did not use the month of July, but July and August, the only months of which we have any record available since reduced wages.

Q. You used the basis prevailing in the immediate past?

A. Yes, sir.

Q. As I understand it, you are not expressing any opinion at all as to the propriety of the Commission computing a scale of rates to be applied for an indefinite period in the future upon the basis of the high prices that prevailed in July and August of this year?

[fol. 870] A. I want to say that the prices prevailing in July and August of this year, in fact they are lowest we have experienced in the last year and a half.

Q. If the Commission from their evidence in the case should find that the scale of prices prevailing in July and August of this year were relatively high, you are not expressing any opinion as to the propriety of taking these prices as a basis for rates for an indefinite period in the future?

A. I thought I answered that before.

Q. Maybe you could answer it a little more directly.

A. No, then. If you want to put it two or three different ways I will say no for all of them.

By Mr. Balmer: Please refer to the Great Northern Annual report to this Commission for the year 1920 and state the average length of haul of all freight traffic in the State?

A. Average haul of all freight traffic in the State of Washington for the year 1920 of the Great Northern Railway Company is shown by this annual report as 160 miles.

Q. That includes both inter and intra-state traffic?

A. Yes, sir, it does.

Q. And carload, and less than carload?

A. Yes, sir.

Q. Have you the average length of haul on the Great Northern system?

A. The average length of haul on the Great Northern system which Mr. Calderhead was referring to was 259 miles.

Mr. Calderhead: Will you give the average earnings of the Great Northern Railway in the State of Washington per car mile?

A. The average haul on intra-state freight in the State of Washington including logs, for 1920, was 72 miles; we have then an aver-

[fol. 871] age, of the logging traffic, 32 mile*w*; intrastate freight in the State of Washington, 72; total freight, inter and intra state in the State of Washington, 160 miles, and of the s*t*stem 259 miles.

Mr. Henderson: Can you give the average length of haul other than logs?

A. No, not without computation.

Mr. Calderhead: Would that agree with your answer to Mr. Clifford as to percentage of log traffic to total intrastate traffic?

A. No, sir.

Q. That it is twelve per cent?

A. I said tons. It does not change the number of tons, no matter how long the haul is.

Q. To Mr. Clifford, were you including interstate as well as intra state?

A. Yes, sir.

Q. So it would be a greater percentage of intrastate traffic?

A. Yes, sir. I have not that figure here but I did have it.

Q. The average receipts per car mile within the State of Washington, both inter and intrastate?

A. It is not given separately.

Q. But in the State of Washington, both interstate and intrastate?

A. Yes, sir, I think that is given in this average. I have it. For the system it is 27 cents approximately and for the State approximately twenty-nine cents.

Mr. Balmer: That includes carloads?

A. Carload and less than carload; interstate and intrastate in both cases.

Mr. Henderson: I thought you had the average length on intrastate and of logs intrastate and I wondered if with these two figures [fol. 872] you could not get the average intrastate other than logs?

A. I regret I cannot with the figures I have here.

Mr. Dudley: You made four computations figuring out capital charges. Taking the total operating expenses or total gross car mile basis or car mile basis, you would include in your capital charge a charge on account of rent of terminals at Everett and Bellingham?

A. Yes, sir.

Q. Do you make any special allocation of that charge to logs different from other traffic?

A. Not as regards capital charge, no, because the method I used was to use the average per mile as found by the State Equalization Committee or Commission, which as I understand includes the valuation of the terminals, or proportion for the valuation of the terminals, so it is considered but it is not used separately.

Q. Do you consider the proper method is showing gross ton mile car basis, when there are terminals not used to a great extent for a particular commodity, to include any terminal?

A. Personally I consider, if I may offer my views that the title here used explains the method which is the proper method to be used. Mr. Calderhead said he would separate the capital charges between freight and passenger on operating expense basis; it is not a far step to say that the capital charge should be assigned between logs and non-logs on the basis of their operating expense and the reason of that is that the capital charges will follow the use made of the property; the best use made of the property, the best measure which he can have is the operating expenses in connection with giving the service. If the operating expenses basis were used in its en- [fol. 873] tirety he would have $108,000 instead of the $80,000 which we have used.

Q. In that system, since the terminal charges would be allocated to logs or to any other commodity whether that particular commodity used the terminal or not to any extent or regardless of the extent to which ot may use it—under that system, or car mile system or gross ton mile, does that result, does it not, in a reduction of cost per mile following an increased volume of traffic—that is the car mile cost is also, or ton mile cost is also, if traffic increases.

A. Any basis lower.

By Mr. Clifford: I understood you to say there had been eighteen millions added in additions and betterment and capital account in 1920. Is that the statement you made?

A. I did not say in 1920. I said from 1908 to 1920.

Q. Do you mean to say that was all in replacements of existing mileage or did that include extensions of mileage?

Mr. Balmer: That was not the testimony of this witness. He simply read from an exhibit that went in evidence at the last hearing.

Mr. Clifford: Does this witness know whether or not that figure is segregated as between replacements of existing mileage and extensions?

Mr. Balmer: I do not think he can answer except from the exhibit.

A. Great Northern exhibit 17 shows the figure that I used, 17,811,519 miles, from June 30, 1908 to December 31, 1920; that is in the State of Washington.

Q. Is that segregated between replacements and extensions?

A. No, sir, it is not.

[fol. 874] Q. Do you have any figures that would segregate that here?

A. No, sir, but I can tell you instances if I had your report of 1908.

Mr. Calderhead: It would include the additional mileage?

A. It would, yes, sir; total expenditures in the State; that would be my understanding of it, yes, sir.

Q. A line has been built from Wenatchee up the Columbia river; so that would not increase the value placed by the railroad Commission upon the Great Northern per mile of road to the extent of eighteen million dollars.

A. Probably not, but there certainly have been some additions and betterments. Certainly; we have made extensive betterments for snow protection involving millions.

Mr. Balmer: In the capital charge in the exhibit we have not included these additions and betterments, but have taken the flat figure used by the State Equalization Committee?

A. We did not consider that, or what proportion; all that was considered was the amount found by the State Equalization Committee.

By Mr. Balmer: That is the Great Northern's case.

[fol. 875] Mr. Robbins: On behalf of the O. W. R. R. & N. Co., in view of our smaller amount of logging operations, being only about 115,000 cars, as compared with much larger movements on the Northern Pacific and similar large movements on the other roads, we have concluded that it will not be necessary for us to duplicate

the general statistical information that has been introduced by the other carriers, and so far as we are concerned, we wish to adopt that testimony, in so far as it is applicable, if there is no objection to that. We desire to put on two additional witnesses and they will be offered here.

Mr. Henderson: May we get a statement of what that proposal is? Are they adopting the proposed scale?

Mr. Robbins: Yes, sir.

Mr. Daponte: Whatever scale is prescribed for the roads may be prescribed for the O. W. R. R. & N. Co.

J. W. Mount, a witness produced on behalf of the O. W. R. R. & N. Co., being first duly sworn, testified as follows:

Examined by Mr. Robbins:

Q. You are the General Freight Agent of the O. W. R. R. & N. Co.?

A. Yes, sir.

Q. I wish you would explain in a general way how conditions on the O. W. R. R. & N. Co. with reference to log traffic compares with conditions on the other roads in the State of Washington.

A. The same conditions that have been testified to by the witnesses for other carriers obtained generally on the O. W. R. R. & N. Company.

Q. As I understand it, the O. W. R. R. & N. would be satisfied with adjustment on rates made in connection with the other roads?

A. We will have to be in a general way. The operations of the [fol. 876] O. W. R. R. & N. are in the same general territory as these other roads, and all of the log traffic in the State of Washington on the O. W. R. R. & N. is on the line between Portland and Spokane, exclusively in Washington, as between Vancouver, Washington and Tacoma, including Grays Harbor country, Tenino-branch, Olympia branch; the main line is operated jointly with the Great Northern and the Northern Pacific; the Grays Harbor line is operated jointly with the Milwaukee, and the Portland by the Northern Pacific; and the Northern Pacific also operates into Olympia; we have two other branches which you might call independent branches, the Tenino branch, only about five miles long, and the Primo branch from Columbia River Junction to Vista, 15 miles long; so it is very evident that if we were entitled to greater rates, we would not secure any greater rate than the Commission would grant to these other carriers.

Q. A great proportion of the O. W. R. R. & N. traffic is on the Grays Harbor branch?

A. About 98% of all logs handled by us is between Centralia and Grays Harbor, Primo branch.

Q. Extending from Centralia to Hoquiam, and from North River to Primo?

A. That is correct.

Q. The road from North River Junction leads in a general Southeasterly direction to Primo?

A. Yes, sir.

Q. From Melbourne on Grays Harbor there is a log line leads south in some direction?

A. Yes, sir.

Q. From Saginaw there is also a logging line, southeasterly di-
[fol. 877] rection?

A. Yes, sir.

Q. Also logging loaded at the port of Cedarville, shipping some timber?

A. Yes, sir.

Q. On the South, Willapa Harbor branch, there is also loading out from the mills north towards Primo?

A. Yes, sir.

Q. Is it not part of your business, as traffic man, to make a study of the traffic conditions along the line there, with reference to the amount of traffic there?

A. Yes, sir, numerous services, in connection with the traffic department, and make reports of investigations for the Union Pacific system.

Q. Have you made investigations as to the amount of timber and how long before it will be exhausted.

A. There have been several service investigations made to ascertain the possible length of operation of that line; several made by our company covering the timber contiguous to the North River Branch, indicating that will be exhausted in ten to twelve years, and the longest time we have heard was by A. J. Merrill of the Saginaw Timber Company, who is the principal operator in that territory, that it was fifteen years.

Q. As a matter of fact Mr. Merrill is the largest operator on the North River branch in that valley?

A. Yes, sir, he is.

Q. His testimony was that the timber would be exhausted in 15 years?

A. Twelve to fifteen years.

[fol. 878] Q. What is the character of country there with reference to being suitable for farming or otherwise?

A. It is not adaptable for agricultural purposes; the country is very rough and ragged and consists of logged off land with the exception of a few pieces of land lying on that river bottom. There is in cultivation today about 640 acres on the entire line, and made up of smaller ranches, I think seven in all, and the climate and the condition of the land indicates that it is not adaptable for agricultural purposes. The line has been in operation for ten years and there has never been shipped, to my knowledge, any carload of agricultural products in the whole ten years.

Q. What is the fact as to whether the North River Junction to Primo is essentially a timber road, built in for the movement of timber?

A. That is what the road was primarily constructed for.

Q. Will that road have any value as an operating railroad after the timber is exhausted?

Ans. None whatever.

Q. Have you any idea of the additional rate that will be required to cover amortization of that line in fifteen years?

A. Yes, I have.

Q. What is the result of your study?

A. The last survey made by our company as to timber contiguous to the line indicated there was approximately ¾ of a billion feet; on the basis of 12 years, which was the time estimated to move that timber, at about 60 million feet a year, our calculations indicated the amortization of the line would require an additional revenue of approximately $61,000 a year or an average of about a dollar per 1,000 feet board measure for the transportation of the logs, in addition to whatever rate the Commission prescribes for the transportation of logs in the State of Washington.

Q. Is there anything further you think of?

A. I believe that is all.

[fol. 879] Mr. Carey: How did the O. W. R. R. & N. happen to build this line in there if the rates would not cover the business handled?

A. One of the objects of the construction of the line was—we had no line for the towns of the Willapa Harbor territory, and there had been numerous logging roads built up from the North and South into this timber and none of the lines had any time been revenue producing. At one time our principal movement of logs was carried on under rates which were agreed upon between shippers and the railroad company as the regular charge for transporting these logs. The Commission very materially reduced this rate, and there has been nothing there that would encourage further extension of the line.

Q. As a matter of fact you built all those roads in Southwestern Washington in order to swell the volume of your shipments of your lumber traffic, primarily?

A. Yes, sir, develop the lumber traffic and any traffic that might be offered; but on this territory where the logs moved a substantial portion of the lumber is moved out by water, and so we hauled the logs and somebody else is getting the velvet, if there is any.

Q. That is just a disappointment any man in business has to encounter when conditions change from those he had in mind at the time he made his investment?

A. Nothing is certain in this world.

Q. Do I understand you actually recommend the Commission prescribe a new scale of rates with $2.48 as initial rate of haul for ten miles?

By Mr. Robbins: I do not think that is any proper examination.

[fol. 880] A. All we want the Commission to do is to give us rates in conformity with the cost of operation as to which testimony has been introduced in this hearing.

Q. I understood the counsel of your line to say he adopted the testimony given by witnesses of the other carriers, and some of them indicated I believe that some of them might be thinking of $2.40 as the proper rate for an initial haul of ten miles, and I will ask you if you are recommending to the Commission to prescribe that rate?

A. We have made no recommendation to the Commission at all in that respect. All they can do is to establish rates based on the evidence introduced here.

Q. You would not want to assume any personal liability in prescribing that rate?

A. If the Commission finds the evidence introduced here on the cost of operations and are satisfied that a reasonable return on investment requires a $2.48 rate of course we want them to find that.

Q. If they actually did that, — would be the effect on the log business?

A. You are as good a guesser as I am, I think, on that.

Q. My guess is you would not have any?

A. I know logs are moving in other parts of the country at rates as high as $2.48.

Q. Where?

A. Mississippi. I am not saying we are going to be governed by rates in Mississippi, but I say there are other places where they charge that, and even higher.

By Mr. Henderson: You were at the other hearing, when the Supervisor announced he was going to ask the carriers to propose a rate [fol. 881] to the Commission, were you not?

A. I do not remember that the Supervisor asked the carriers to propose a rate; that would not be——

Q. Did he not ask everybody interested, including the carriers, to propose a rate, and as a matter of fact a questionnaire was sent out asking that you propose a rate?

A. We know we have not proposed any, if you mean that.

Supervisor Cleland: My intention was that every party to this proceeding should make some recommendation as to the question of rates. We will amend it now so as to include them.

Mr. da Ponte: That part of it was directed to the loggers.

Supervisor Cleland: We will amend it now and direct the railroads to file such recommendations.

Mr. Dudley: In a paper of that kind which would be offered we are facing this, we would have no opportunity to examine witnesses and that is one of the principal reasons we have not replied to the questionnaire. Incompetent testimony admitted in that way would result in prejudicing the decision of the Commission.

Supervisor Cleland: I do not know of anybody who would be in a better position to recommend a rate that would move traffic than the traffic officials of the carriers or the loggers, and I sent out that questionnaire in good faith hoping that somebody would recommend some rates that would be compensatory and would move the traffic. If the carriers do not care to co-operate in furnishing that information of course we will make up our own.

[fol. 882] Mr. Dudley: At the time of the last hearing I told the Chairman of the Commission we would object to preparing and recommending a rate until the testimony was all in, and I think the Chairman told me that was proper; that is, we could not undertake to make a recommendation until the testimony was all in, and I would object to a recommendation from any one for the purpose of determining what was a reasonable rate unless the parties were produced here and we were given opportunity to cross examine them on the stand.

Supervisor Cleland: Is it not proper practice for parties to rate case to suggest rates that they think will be reasonable under all the conditions, and will be compensatory and move the traffic?

Mr. Dudley: I do not know of any such practice.

Supervision Cleland: I think it is the practice to suggest rates in electrical cases, and I suggested that this be attempted in the present case.

Mr. Dudley: Where a witness is on the stand—but to receive that through the mail, with no opportunity to cross examine, for him to make a recommendation it would be very objectionable and when not in evidence it would be incompetent.

Supervisor Cleland: Have you any witnesses who would like to suggest to us a reasonable rate, or scale of rates, to be applied, which would be compensatory and liable to move the traffic?

Mr. Dudley: Exhibits have been put in evidence showing what would be compensatory, showing the minimum reasonable rate that would be compensatory.

Supervisor Cleland: That does not interest me at all; a rate may be compensatory and not move the traffic.

Mr. Dudley: That is a matter of law. I do not agree with you. [fol. 883] If it is not compensatory it can not be enforced and put into operation, whatever its effect upon the traffic.

Supervisor Cleland: I think this Department owes more to the public and the carriers than a tariff that will not move traffic.

Mr. Dudley: If you do establish such a rate in order to move traffic you are confiscating carriers' property.

Mr. Henderson: That depends upon whether the cost is prohibitive or not.

Mr. Balmer: I want to suggest at this time, making it only of course for the Great Northern company, but if it were favorably received, I think some of the other carriers and possibly all of the other carriers would be disposed to agree in it—we suggest that the carriers not only propose a scale of rates, but file it in the shape of a tariff, the understanding being of course that if it is lower than a compensatory scale for which they contend it is to that extent a voluntary rate, being filed by them of course in view of these investigations, that the department immediately suspend it, and the carriers would then ask that all the evidence which has been introduced at this hearing be considered as applicable to the proceedings upon the suspension order of the Department. If this suggestion is favorably received I feel certain that some of the carriers and possibly all of them will be disposed to join in.

Mr. da Ponte: Without committing myself, as I have not discussed it—I have been asked here, or twitted with the suggestion that we are afraid to suggest a rate. If the loggers are wanting in good faith that the carrier companies suggest a rate, it seems to me that is perfectly fair and reasonable and a legitimate condition upon which [fol. 884] it should be done; put us in this attitude, that what the company or the carrier may do voluntarily to lower the compensatory rate is not a measure of what the Commission or court may require them to do.

Should we file a tariff which will be below what the evidence as offered shows will be a compensatory rate, that would be used against us — an argument, and we would get no benefit from it. I did not attach much importance to these suggestions; those of the loggers that I have seen have not been—they have been ridiculous; they are thirty per cent or so below what is fair. Unless the parties are going to put in suggestions in good faith it is a waste of time to fool with it. If they want these suggestions as to what rate the carriers are willing to put in we will come prepared tomorrow to determine it.

Mr. Carey: Do you or not acquiesce in the suggestion?

Mr. da Ponte: I have not discussed it, but if you want us to consider it, this would be the only terms upon which it would be worth while.

Mr. Henderson: I am not going to make the admission that anything the carriers have heard in evidence is not in good faith. I understand everything the loggers have put in has been in good faith, and resent the intimation on their acts that what they did was not in good faith, and therefore we were not in good faith. We have been in good faith all the time, and if this proposed rate is not in good faith I move it be stricken from the records.

Mr. da Ponte: It is the rate they are asking us to file.

Mr. Henderson: To come here and propose a rate and then say to the Commission it is not a good faith proposition is playing horse with the Department and the loggers and everybody else. We ought to know whether the propositions are in good faith, and this Depart- [fol. 885] ment is entitled to know if the position of counsel is that if this Commission will say we can not get you anything less than the propositions offered here "we will let you do something else, which is equivalent to saying you cannot do anything in the matter; we have proposed a tariff for the handling of logs and we are going to do as we blamed please." That is the sum and substance of Mr. da Ponte's proposition, that they will do as they please. If that is correct we have been wasting an awful lot of time and expense. It is certainly proper for the Commission or anybody else to get traffic men to say what kind of a rate there ought to be put in there. And as to Mr. Dudley's suggestion that it would be impracticable to propose a rate in that manner, I will ask this question, so he will be able to cross examine—and I am not asking the railroads to put in a tariff not subject to cross examination—I am asking for the privilege of cross examination myself on the tariff which they proposed——

Mr. Dudley: Has there been submitted to the Commission in this

hearing any proposed rates which have not been submitted in open court?

Mr. Henderson: I think not.

Supervisor Cleland: I think a questionnaire carried the rate.

Mr. Dudley: If there has been answers to this questionnaire received and considered by this Commission——

Supervisor Cleland: There have not.

Mr. da Ponte: Mr. Henderson misrepresented what I said and made a grand stand argument and that is illustrative of the situation. The rate these loggers proposed was thirty per cent or more under the existing scale; I did not say good faith inadvisedly, but they can not expect us to consider them at all, and what is the use of putting that [fol. 886] kind of a thing in; you get further and further away. If they want us to suggest a scale which we might be willing to accept, to hear what we think the logging rates are entitled to, we will consider that and be prepared to let them know whether it is worth while.

Mr. Henderson: We are not asking the carriers to violate any of their legal rights. I call counsel's attention to the fact that if tariffs are under the proposed rates they are still not as low as rates voluntarily put in.

Mr. Da Ponte: If a man has a $2.50 rate and wants us to put in a dollar rate——

Mr. Henderson: You had lower rates than that once.

Mr. Balmer: I would like to have a reply to my suggestion, which was made in good faith.

Mr. Henderson: If that involves the proposition of having a tariff put in here where we were not here to cross examine—near the close of the hearing, and traffic men are not here to cross examine—if there is to be a tariff proposed let us have it now.

Mr. Balmer: This is the proposition we will be disposed to make, as soon as we can have a tariff prepared, and our tariff men will commence working on it immediately, and so far as the Great Northern is concerned, and I think other carriers will agree, it will be presented, if it can be presented on the terms I mentioned, that is, it will be immediately suspended and all the evidence taken by the Commission in the hearing so far will be considered as applicable to the order suspending the tariff.

Mr. Henderson: They can propose any tariff, under any basis they choose to. I have not authority to consent to a proposal of a tariff; I cannot bind the public on what is going to happen.

[fol. 887] Mr. Da Ponte: I think when it comes to a shown down you will not stand the gaff.

The Director: As far as the Department is concerned, we will be very glad to have carriers file a tariff as Mr. Balmer suggested, and as soon as possible, during the hearing if possible.

Mr. Dudley: We will be willing to join in that on this condition, that the tariff, if filed, will be considered as a compromise proposition tender, and as in no way conceding that the figures and testimony as to what is necessary as a compensatory rate will be abandoned or changed in any particular.

Mr. Da Ponte: You mean, without prejudice to our case in the event it is adopted.

Mr. Dudley: Otherwise, on the behalf of the Milwaukee, I must decline.

Supervisor Cleland: That was our original suggestion, that it is without prejudice to anybody's legal rights.

Mr. Henderson: If there is a tariff proposed it has to come in without any demands or admissions. We are not horse-trading.

Supervisor Cleland: We simply want to get information from men who know what the traffic will move under, and what is reasonable, so we can be guided. I do not say we are going to adopt it.

Mr. Da Ponte: We do not want to prejudice any of our rights.

Supervisor Cleland: It will not be considered as prejudicing anybody's rights.

Mr. Da Ponte: With the understanding that if it is filed and suspended the record here will be part of the record of the case?

Supervisor Spinning: When will it be filed? We want to hear first what the loggers have to say, as was the original understanding. It was understood the loggers would want to see what the conditions are.

[fol. 888] Mr. Da Ponte: We think we ought to hear what the loggers say.

Mr. Henderson: I think I was the one that objected to the filing of that tariff, and the Supervisor said he wanted it right now.

Mr. —— ——: Mr. Cleland asked me to suggest a reasonable scale of rates, and what I thought ought to apply under the present conditions, and I said that I could suggest a reasonable scale, that is a compensatory scale, but if something else than that was necessary to move the traffic, if the suggestion wanted was as to what the traffic would bear under present conditions, I first wanted to hear the testimony of the loggers and know what it was on those conditions, and what they were up against.

Mr. Robbins: In view of the testimony and discussion I do not think it would be hardly right to call any witnesses to prove or propose a scale to bind other roads. We should confer with the others before proposing a scale.

The Witness: My views are that what the carriers are entitled to should be determined before any scale is imposed.

The Director: In view of the fact that the carriers appear to be willing to submit a tariff, I do not think it will be necessary to cross examine more on the matter.

[fol. 889] J. C. M. Dodds, a witness produced on behalf of the O. W. R. R. & N. Co., being first duly sworn, testified as follows:

Examined by Mr. Robbins:

Q. You are auditor of the O. W. R. R. & N. Co., of Portland?
A. Yes, sir.

Q. You have been sworn and have testified in previous hearings?

A. Yes, sir.

Q. I believe you have already prepared eight exhibits in this case heretofore?

A. Yes, sir.

Q. Have you made any study of the Grays Harbor Branch of the North line with reference to valuations?

A. Yes, sir, I have.

Q. Will you state what has been the result of your study?

A. The records of our company show that the actual cost of our Grays Harbor branch proper, not including the North river line is $2,924,543.

Q. That valuation is actual, is it?

A. That is actual cost. Valuation or actual cost of the North River line is $743,283, as used in our logging operations.

Q. How have you divided that valuation with reference to freight and logging service down there?

A. I have taken the valuation of Grays Harbor Branch and made division on the basis of operating expenses assignment between freight and passenger, in accordance with classification rules of the Interstate Commerce Commission, and have found that the percentage accruing to freight was 68% in the State of Washington for 1920.

Q. In round figures?

[fol. 890] A. Valuation accruing to freight proportion $1,989,000.

Q. What proportion of the North river line have you assigned to logging freight?

A. Entire, per cent to freight service, because our other freight traffic there is practically nil. That results in a total freight valuation of $2,731,972. We have gone further in this segregation in order to assign a portion to the log traffic, and have made this assignment on the basis of relative gross ton miles. Logs hauled on North River line in Grays Harbor branch had gross ton mileage equal to 23.19 per cent of the total gross ton miles on this line. Using this percentage of 23.19 miles in valuation accrual, gives $633,544.

We have also taken from our records the valuation of rolling stock equipment assigned to logging traffic, $515,200.

Q. As I understand, that valuation is actual?

A. Yes, sir.

Q. Have you made any computation as to taxes, as assigned to Grays Harbor and North river line?

A. Yes, sir, I have. Actual tax payments on our property on the Grays Harbor branch were $35,037, excluding the equipment, and we have used the same division as I have on valuation, resulting in accrual to freight proportion of $23,826. We have taken the entire tax on the North River line and seen that that is over $6,276 on a total assignment to freight service of $30,102, and using the relative gross ton miles, 23.19 per cent gives the amount of taxes that would be assignable as $6,981, and the taxes on equipment assigned to logging operations is $1,317, or a total tax assignment to logging operations of $8,298.00.

[fol. 891] Q. Have you prepared these calculations in convenient form to be passed around?

A. I have.

Admitted in evidence and marked O. W. Exhibit 8.

Q. Have you made any calculation on the theory of amortization of this North river line?

A. Yes, sir.

Q. Explain that.

A. I have taken the construction cost of this entire line, that is $950,751, actual cost to this company, and I have ascertained the amount of salvage due to the receivery of track material as being $37,205, and on right of way $1,000, or a total salvage recovery of $38,205, leaving the amount unextinguished of $912,546. Taking the basis of the longest time mentioned by Mr. Mount of fifteen years, there would be accrual of one-fifteenth per annum, of $60,836.00.

Q. There will have to be annual return of $60,000 in order to cover extinguishment of this line in fifteen years?

A. There will.

The paper covering the amortization figures was admitted in evidence and marked O. W. Exhibit No. 9.

The Director: I would like to ask the purpose of this testimony in other words, if the O. W. R. R. & N. Co. is willing to accept whatever rate shall be determined proper for the other roads, for the purpose, you are setting up special instances.

Mr. Robbins: We want you to know the actual conditions down there. It is a special condition, and we are calling your attention to it for what it is worth.

A. I do not see that it is very material in a general rate case.

[fol. 892] Mr. Robbins: I am offering it for what it is worth.

Q. There was some question raised yesterday as to the question of general labor conditions in 1920; what have you to say about that?

A. I would state that for my own information I attempted to ascertain the effect of the labor decisions, that is Decision No. 2, 147. Decision No. 2 if applied to the calendar year and if decision 147 had been applied last year, and I have found that it would make a relative difference as far as our operating cost is concerned as applied to logging operations of about $1,783.

Q. As applying to the O. W. R. R. & N. Co.

A. Yes, sir.

Q. Is there anything further you wish to state?

A. I believe that is all.

Cross-examination.

By Mr. Henderson:

Q. What is the length of this North river line?

A. About fifteen and a fraction miles.

Q. Were you with the company when it was built?
A. Yes, sir.
Q. It was built for the express purpose of taking out that timber?
A. It was my understanding.
Q. You were familiar with the rates then in effect?
A. I am not sure.
Q. The railroad certainly was familiar with logging conditions?
A. Yes, sir.
Q. You built that road in there and put in a rate voluntarily at that time, didn't you?
[fol. 893] A. It is my understanding we did.
Q. Before doing that the railroad surveyed the timber and expected under that rate, or what they established, they could pay for building that road, and so built it for that purpose?
A. Yes, sir.

Mr. GREENGARD recalled by Mr. Dudley:

The witness stated as follows: In testifying yesterday as to breakdown between all freight and logging traffic, I testified that we broke it down on the basis of gross ton miles. I wish to correct that and say we broke it down on basis of car miles.

By Mr. Dudley:

Q. That is, the capital charge?
A. That is, taxes and investment charge.

E. C. GIBBS recalled by Mr. Dudley:

The witness stated: I believe you asked me to give you the number of loads handled on the National Park branch for July 2. That is, with reference to Exhibit 27. There were 1,209 loads.
Q. The average load of car, also?
A. I do not have that on the National Park Branch, but upon point to point movement as shown on Exhibit 23 for the Coast Division, 1920, that is 7,291 feet.

[fol. 894] HENRY L. GRAY, a witness produced on behalf of the loggers, testified, having been first duly sworn, as follows, to-wit:

Examined by Mr. Henderson:

Q. During past hearings there were introduced exhibits by you, which you had prepared, basing the figures in some of those exhibits on information you then had. Have you revised those exhibits in the light of the information and evidence, since the last hearing?
A. I have, yes, sir.

Q. I wish you would refer to those exhibits, Mr. Gray, and if you have copies of them, we will distribute them.

These exhibits were referred to as Exhibits 1, 2, 3, 4, and 5.

A. At the original hearing I introduced six exhibits; two of those exhibits, Numbers 5 and 6, were not subject to revision, and are not included in this document. I have, however included in this pamphlet one pamphlet which was not introduced at the previous hearing, that being number 7. I might state that these are all referred to in the explanation of the exhibits which precede the exhibits themselves.

Q. Have you prepared these revised Exhibits 1, 2, 3 and 4 and new exhibit 7, and revised Exhibit 3-A, all under one cover, so they could be introduced and discussed at one time?

A. Yes, sir.

Mr. Henderson: We offer these exhibits in evidence at this time for the purpose of examining the witness, and for the purpose of the record.

Admitted in evidence and marked Ass'd Logg. Shippers Ex. Nos. 1, 2, 3, 4, and 7 and revised Ex. 3-a.

[fol. 895] Q. Taking these exhibits, will you proceed and explain and discuss them.

A. Referring to Revised Exhibit No. 1, showing the comparative unit revenues from the freight traffic of the four principal carriers during the years 1919 and 1920. The unit revenue of the system in each case compared with the unit revenues obtained within the State of Washington. That exhibit was prepared for the purpose of showing that the unit freight transportation revenue obtained within the State of Washington, per unit of 1,000 net ton miles is greater than the corresponding revenue earned upon the system as a whole.

Q. Have you anything in this exhibit with reference to the transportation costs in comparison with transportation revenues which you desire to refer to before referring further to this exhibit?

A. The transportation cost system and study is shown on Exhibit 3-A, which shows 1920 operating cost of the four principal carriers, system and state. It shows that the unit freight operating cost charged to the State of Washington, is considerably in excess of the corresponding unit operating cost charged to the system as a whole.

Referring to my analysis of that exhibit on page 3, at the bottom, I state that this exhibit shows that the unit operating expenses charged to the State of Washington in 1920 by the four principal carriers were considerable greater than the corresponding unit expenses for the system as a whole. The cost of operation charged to Washington by the combined carriers being $6.27 per thousand gross ton miles, while the corresponding figure for the combined systems, all states, was only $4.48 per thousand gross ton miles. That is equivalent to saying that the operating expenses allocated to the [fol. 896] State of Washington are forty per cent in excess of the

average unit expenses of the system, or 48 in excess of those parts of the combined system other than the State of Washington.

In other words the average due to the method of allocating the freight expenses by the carriers, the charging all of the terminal expenses of the State of Washington to the State of Washington, result in showing a unit operating cost for the State of Washington forty per cent greater than the average operating cost for the system.

Q. And forty-eight per cent greater?

A. Forty-eight per cent greater than the other parts of the system excluding the State of Washington.

Q. You have a comparison on page 1 of the unit revenue of the logging traffic as compared to other traffic.

A. I have not reviewed that yet. That is in connection with Exhibit 1. Exhibit 1 shows that the unit revenue derived from the State of Washington is greater than the corresponding unit revenue derived from the system. The total at the bottom of page 1 shows that the unit revenue obtained from the log traffic within the State of Washington is greater than the average unit revenue obtained from the traffic as a whole within the State of Washington.

Q. Can you give that in percentages?

A. Yes, sir, approximate percentages. The unit revenue from the log traffic, taking all of the carriers combined is approximately 25% greater than the unit revenue within the State as a whole.

Q. $11.97 within the state?

A. Yes, sir. Exhibit 1, if you will refer to that; taking the Great [fol. 897] Northern, you will see that the Great Northern in 1920 had a unit revenue of $12.41. If you will refer to page 1 you will find that same figure $12.41 as compared to unit log revenue $17.02.

Q. Was the ratio between unit revenue log traffic and other traffic on the Great Northern is it much greater?

A. Much greater. The fact that the excess of unit revenue on the Northern Pacific—lower than other roads, brings the total percentage down quite a little.

Q. Is that all you care to say with reference to exhibit No. 1, comparisons of log traffic and total traffic?

A. Yes, sir, that is all I can say about it. It is simply a reduction of revenues.

Mr. Da Ponte: What have you to say if anything to show what the proportion of the expenses per unit revenue in the log traffic is compared with proportion of expense to unit revenue in other traffic in the State?

A. Would not your question lead back to question of cost of log operations?

Q. It would count under rates of log traffic.

A. I have no computation as to the cost of hauling logs, no, sir.

Mr. Hederson: Will you take up exhibit No. 2, and make such explanations as you desire. This relates solely to intrastate log traffic, does it not?

A. Exhibit No. 2 is a compiled statistical table for the purpose of supplying all the information possible concerning the log traffic within the State of Washington. It shows the volume of the traffic

as indicated by loaded cars: it shows the volume of the traffic by ton miles, and also shows the average haul and revenue per car, [fol. 898] revenue per 1,000 board feet and revenue per car mile and per net ton mile.

Q. It shows the average loading, does it?

A. Yes, sir.

Q. To be——

A. Average loading for all of the carriers is 7,462 board feet per car.

Q. Does it show the average haul of the entire system?

A. Yes, sir, it shows the average haul to be 27.42 miles.

Q. The average haul on the Great Northern?

A. 32.02 miles, being the greatest average haul of any of the carriers.

Q. What was the smallest average haul?

A. In the case of the Oregon-Washington, 15.02.

Q. Revenue per loaded car as between the Northern Pacific and Great Northern and the O. W. R. R. & N.?

A. Revenue per loaded car in the case of the Northern Pacific was 12.88; in the case of the Great Northern 14.83, in the case of the Milwaukee 12.17 and in the case of the Oregon-Washington it was 12.55; the weighted average for four carriers combined, being 12.77.

Q. So that the loaded car mile revenue of the Oregon-Washington with an average haul of 15.02 miles, is approximately the same as that of the Northern Pacific with an average haul of 31.38, or more than twice their average length of haul?

A. Yes, sir.

Mr. Balmer:

Q. On sheet 1 you show comparison of revenue per 1,000 ton miles, total traffic freight for the State and intra-state for Great Northern Railway Company, as $12.41?

A. Yes, sir.

[fol. 899] Q. And log traffic is $17.02?

A. Yes, sir.

Q. I would like to refer you to Exhibit 3, item 11. What is the revenue per thousand *thousand* ton miles of intrastate freight other than logs on the Great Northern?

A. Revenue per thousand ton miles of intrastate other than logs on the Great Northern is $25.18.

Q. What is it for logs?

A. $17.00.

Q. What is the ratio of the intrastate freight average per thousand net ton miles on traffic other than logs compared with traffic on logs?

A. You mean percentage relation between the two?

Q. Yes.

A. The apparent revenue from intrastate other than logs as compared with intra-state log traffic, the relation is as 1 to 1.47

Q. Intrastate other than logs is 1.41 of the intrastate on logs?

A. Yes, sir, provided the addition you have made as to intrastate ton miles and interstate ton miles is correct. I might add that is vastly different from the distribution which the Commission made in 1906. You have reported for the State of Washington for 1920, your intrastate ton miles were only 18% of total ton miles in the State. Mr. Calderhead in 1906 after an examination which required more than a year, found that of the total ton miles within the state, your intrastate traffic was responsible for approximately 35%. If you will substitute 35% for the 18% which you have, you wipe out a large part of that 45% present excess.

Q. Would you say the conditions are the same today as in 1906?

A. I do not know.

Q. You say our report of the intrastate revenue is not correct?

A. No, I did not.

[fol. 900] Q. I misunderstood you. Is not the intrastate revenue on logs and revenue other than logs figured upon point to point movement and is there not a chance of any interstate traffic being included in that traffic?

A. I do not understand you have any interstate traffic on logs.

Q. I am talking about other freight than logs, intra-state. Isn't the intrastate freight revenue figured on point to point movement of each and every shipment moving within the state?

A. That is the way I understood Mr. Calderhead figured it in 1906.

Q. That is the way it is figured now?

A. That is the way.

Q. That gives revenue of freight intrastate other than logs 1.47% of revenue from logs.

A. Assuming the figures you have reported are correct, and I do not say they are not correct.

Q. Would it be fair to make comparison between revenue from intrastate other than logs rather than include in your statement the entire interstate movement?

A. It is not a question of fairness; I have set out the figures and told you what they were.

Mr. Da Ponte:

Q. The exhibit 2, showing the revenue received by the various carriers from the log traffic indicates the rates of the Great Northern would be considerably higher than that of the Northern Pacific and Milwaukee.

A. I know that to be the case, but I do not know whether Exhibit 2 indicates it or not. Why do you think it indicates it?

[fol. 901] Q. It is my understanding. Take revenue per thousand board feet on Northern Pacific, it is $1.67, Great Northern $2.26.

A. No, that would not necessarily indicate anything; you might haul further on one road than another. Revenue per thousand feet bears no relation necessarily to the rate.

Q. Why put that in there?

A. Simply shows the average rate which you got during the

year; this exhibit contains no argument; it is simply a statement of statistical facts which I think will aid the Commission, and that is all I show—in getting the results.

Q. For general reference?

A. Exactly.

Q. Take the Northern Pacific as possibly compared with the Milwaukee—you show 101,000 loaded cars, with 84,848 on the Milwaukee?

A. Yes, sir.

Q. Revenue on the Northern Pacific is $1,308,000, and on the Milwaukee $1,032,000. What does that indicate with regard to the relation of the rates between these charged by the two companies?

A. I do not think it indicates anything. I think it indicates that one road got more for a loaded car than the other road.

Q. Taking your revenue per loaded car on the Northern Pacific as $12.88 and on the Milwaukee as $12.41, with the average mileage on the Northern Pacific of 31.38 and Milwaukee of 23.82 miles, it indicates that the Milwaukee is receiving considerably larger revenue per car mile than the Northern Pacific, does it not?

A. From a study of this thing, the revenues and the rates run about like this, the Northern Pacific least, the Milwaukee next, the [fol. 902] Great Northern next, and the O. W. & R. R. N. next. It is very difficult to say from this table.

Q. This indicates that the Milwaukee is receiving more revenue per loaded car mile than the Northern Pacific?

A. No, the Northern Pacific is receiving more revenue per loaded car than the Milwaukee.

Q. I mean per loaded car mile?

A. Yes, sir, the Milwaukee gets ten cents per loaded car mile above the Northern Pacific.

Q. Is there anything to indicate which company is making the best showing to the log traffic from the net receipt standpoint?

A. The revenue per net ton mile would come nearer telling the story.

Q. Does that tell the story as to which company was making the best net result?

A. The revenue per net ton mile which will show you which company is getting the most money per net ton—per unit of haul.

Q. So that the Milwaukee is getting the most money per unit of haul?

A. No, but as compared with your road, it is.

Q. But this does not indicate they are getting the most net revenue with proportion to expenses?

A. No, there is nothing here referring to net revenue.

Q. This exhibit then does not throw any light upon what the issue we are to determine is?

A. It throws considerable light upon the issue we are determining. You can not get anywhere without statistical data to begin with.

Q. It does not indicate what rate there ought to be on any particular line?

A. No.

[fol. 903] Q. Or what rate would be reasonable for one line as compared to another?

A. Oh, no.

Mr. Dudley:

Q. Referring to loaded car mile, item 10, that is the gross amount received per each car transported?

A. Yes, sir, it is the gross revenue from log traffic divided by the loaded cars.

Q. It is the number of cars, in the case of the Northern Pacific 101,725, multiplied by $12.88, the revenue per loaded car, should give $1,308,075 total?

A. Yes, sir.

Q. In the case of the Milwaukee, 84,848 loaded cars multiplied by $12.17, should give $1,032,257?

A. Yes, sir.

Q. You speak here of revenue per thousand board feet; that means for average haul, shown in the exhibit?

A. It is for the total haul; that item is obtained by dividing the total revenue as shown by item 5 as sworn by the total haul as shown by item 2.

Q. Leaving out of consideration length of the haul?

A. Yes, sir. If we want to find out anything about the transportation of logs in the State of Washington for 1920 other than the cost of handling logs, you can get it from this table 2; it is all here.

Q. That is what we are trying to find out.

Mr. Henderson: I thought that is that you knew.

Q. It will be very useful.

A. This information was to a very large extent obtained from data furnished by the carriers.

[fol. 904] By Mr. Henderson: Exhibit No. 3, please explain that.

A. No. 3 was compiled for the purpose of ascertaining just how 1920 unit revenue from log traffic compared with the corresponding unit revenue from other intrastate traffic as well as from interstate traffic and from the state traffic as to haul. Of course all these figures relate to the State of Washington.

Q. Mr. Turnburke seemed to find fault with your comparisons. You evidently made comparisons on Exhibit 3, have you not?

A. Certainly.

Q. Is there anything further you care to say about exhibit No. 3?

A. No, except this; that it strikes me as being rather strange that the proportion of state and interstate ton miles within the State of Washingon should have changed so decidedly since 1906.

Q. From this table it will be shown, will it, that the revenue per thousand net ton miles of interstate freight other than logs was in excess of corresponding revenue from log traffic?

A. Yes, sir, except in the case of the O. W. R. R. & N.

Q. And that the log traffic was greater than unit traffic from all traffic?

A. Oh, yes, log traffic was much greater than revenue from all traffic, and in case of the O. W. R. R. & N. log traffic was greater than from all other intrastate traffic.

Mr. Balmer: Always speaking on the basis of unit revenue per thousand net ton miles without regard to any other condition which might differentiate the various classes of traffic?

A. Yes, sir.

Mr. Calderhead: That change of state traffic or percentage given [fol. 905] in this exhibit and the one in 1907 and 1908 might be due to the fact that grain over the Great Northern and the eastern points largely moved to Portland instead of Puget Sound terminals?

A. Yes, sir, it may be, Mr. Calderhead. I imagine there might be any number of things which would account for it. How about the movement in the year 1920?

Mr. Calderhead: Probably there was in 1920 a very heavy tonnage of grain to Portland which formerly you would have in state traffic, and would have the effect of changing state to interstate.

A. That might, easily, account for it.

Mr. Balmer: You have not endeavored to explain the figures shown in Great Northern 1920 figures?

A. No, sir, I have not.

Q. In your mind, there are circumstances concerning that proportion which have changed it greatly since 1906?

A. Yes, sir, for example, the Northern Pacific now reports that its percentage of intrastate ton miles to total ton miles in the state is 27%, and it was found in 1906 to be 45%.

Mr. Da Ponte: Don't you reason that freight traffic has developed since 1906, and there is a tremendous traffic now?

A. I would hardly think so much, would hardly like to say that it had all developed since 1906.

Mr. Balmer: It substantially has on the Great Northern.

Mr. Da Ponte: The great bulk of it has.

A. That might easily be. I do not attempt to say that either one is wrong, but there is rather a remarkable shrinkage there, and worth looking into.

Mr. Da Ponte: Did you look at the 1919 figures?

A. No, I did not.

Q. They correspond with the 1920 figures.

[fol. 906] A. I presume they would.

Mr. Da Ponte: These unit revenues are simply gross receipts and are not intended to show what the proportion of expenses to gross receipts per unit is of traffic?

A. No, this has no reference whatever to any expenses of any kind.

Q. In fact there is no cost figures on your exhibit?

A. Later on there is some.

Mr. Balmer: When you said the revenue from logs was greater than from other traffic, you meant all traffic, including inter and intra state? You did not mean revenue from logs was greater than revenue from state traffic?

A. I did not so state.

Q. You meant all other freight, intra and interstate?

A. Yes, sir; to sum up; in the case of all the carriers except the O. W. R. R. & N., using the figures furnished by carriers in their annual reports as a basis of division between intra state and interstate ton miles, it would appear that intrastate traffic other than logs provided a greater unit revenue per thousand gross ton miles than did the logs themselves, but in the case of the O. W. R. R. & N. it is the other way.

Q. Do you know anything of the relationship between the average haul of logs intra state and average haul of all freight intra state?

A. I have no definite information, no.

Q. Would you say the average haul of freight other than logs was greater than the average haul of logs?

A. I would think it would.

Mr. Henderson: I did not get that.

Mr. Balmer: I mean—assuming that the average haul of logs on other freight is much greater than that of logs, or was twice or [fol. 907] more, would you not expect under a proper scale of rates to see the revenue per net thousand ton miles on other freight, less than that on logs, because of the element of short haul?

A. No, I would not think so.

Q. You would not expect on long haul business to see a lower revenue per ton mile than on short haul business?

A. Yes, sir.

Q Expect lower average revenue on long haul business than on short haul business?

A. Yes, sir.

Q. This shows that that average haul of double that of logs—that the other freight has higher revenue than that of logs per thousand ton miles.

A. On the basis of figures furnished by the carriers, that is true.

Mr. Da Ponte: Does not that indicate that the freight other than logs is much more remunerative, to your mind?

A. I do not think so. I am prepared to explain that answer in each case.

Q. Do you know of any authority that agrees with you in that op-nion?

A. I do not know that I do, but I will endeavor to——

Q. You will endeavor to establish a new theory?

A. No, I think——

Q. You were testifying about Exhibit 3-A. I believe you made a statement that the operating cost per thousand gross ton miles in the State of Washington being something like forty per cent greater than the cost on the system was due largely to the fact that the terminal expenses largely—to the assignment of heavy terminal expenses in the State of Washington?

A. Yes, sir.

[fol. 908] Q. Might it not also be due to another class of topography, more adverse operating conditions, snows to contend with,

mountains, heavy grades, lower density of traffic, different average haul, from the average of the system?

A. Have you exhibit 3 before you?

Q. 3-A.

A. Take a look at the Washington-Oregon figure; there is no great difference between Washington and Oregon.

Q. I do know about the Great Northern. There is a difference, a wide difference, on the Great Northern and Oregon. Do you say that difference is due entirely to heavy te-minal expenses in Washington?

A. I do not.

Q. You do say these other items will affect the expenses that I have enumerated?

A. The question of topography and things of that kind?

Q. Low density of traffic, different average of haul, topography, etc.

A. Yes, sir.

Q. The O. W. makes a very small element in that charge. Leaving that out, that difference in cost may be due not entirely to this terminal expense feature?

A. I do not contend it is due entirely to this terminal expense feature. I simply wanted to bring out the fact that in this rate cost the entire terminal expense incident to the State of Washington has been charged against the State of Washington; the carriers are not satisfied with that. They come down and take a couple of divisions within the State, and put all the terminal expenses on them, and further center it, and take logs, just 33⅓% of the total tonnage [fol. 909] within the State, and it makes necessarily a pretty heavy percentage of terminal cost to put it on that basis.

Q. You have seen Northern Pacific Exhibit which figures the cost of logs which excludes these terminals?

A. I take that as an admission they should not be included.

Q. We will make no such admissions, of course. You realize that the cost per ton mile on branch line is greater than the main line?

A. Yes, sir.

Q. Suppose in the State of Washington you have a much bigger percentage of branch line than of main lain-, than on the system as a whole, don't you expect a greater unit of cost for that reason?

A. Yes, sir.

Q. Suppose in the State of Washington the proportion of intrastate traffic is greater than in the other states, would you not expect to find more operating expenses chargeable to traffic?

A. I do not grasp that exactly.

Q. You realize that interstate costs less than any other kind, because of the difference in haul?

A. Because you charge terminal expense to State of Washington and do not charge any to Idaho and Montana.

Q. You realize that intrastate business, as every one admits, because of the shorter haul, is more expensive per ton mile because of the short haul?

A. Yes, sir.

Q. Do you state that intrastate costs more per ton mile than interstate business?

A. Generally speaking, yes, sir, provided you would take your terminal costs at one end and spread them over your entire haul. [fol. 910] Q. Isn't this great cost of intrastate business per ton mile due to the fact among others, that your haul, intrastate is less than your interstate haul in distance?

A. Well, that all comes back to the old question; you have cost which includes certain things. Your divisor fixes the unit cost; if you take a part of that cost, a very substantial part of that cost which might be applied to a long haul, such as interstate haul, and put it altogether against a short haul, why you would not expect under those circumstances that your per ton mile of the short haul, cost per ton mile of the short haul would be in excess of the cost of the long haul, but if you spread it out, something would result.

Q. Of course if you put, you spread these fixed charges over a greater distance. If in the State of Washington the intrastate short hauls bear a larger percentage of your total business than they do in other states through which the system operates, you will inevitably proportionately increase your unit cost in the State of Washington over the other States.

A. That might be true.

Q. Those things tend to explain the condition which your figures show in this case?

A. They might bear some portion of the expenses of the difference. But I do not retract my original statement that you have assigned your terminal expenses against the State of Washington, and furthermore you have attempted to concentrate it down to about one third of the State of Washington, so you are gradually taking this big item of terminal expenses and charging it to a great extent to that portion of the roads over which the logs come down, and [fol. 911] makes them bear a substantial part of it.

Q. What is the average expense of the business on the Seattle and Tacoma Divisions as compared with the average business in the State of Washington? What is the average per thousand ton miles on the Seattle Tacoma Divisions as compared with the average in Washington?

A. One of your exhibits shows that terminal cost.

Q. Do you know what it is?

A. No.

Q. Why do you make this charge?

A. Because it is true.

Q. You say you do not know what the expense was, which concentrated against the log traffic?

A. My statement is perfectly correct, and your own witnesses have borne it out.

Q. You simply testified from the exhibits that have appeared in evidence, and whatever they show you stand by?

A. Hardly.

Q. Where else have you got information?

A. It is a matter of common knowledge to all that are familiar with your railroad accounting, that in your Washington rate cases, there is not a cent of your terminal charges taken out and assigned to other states. I wonder if you do that in a case in South Dakota.

Q. What rate cases?

A. I will ask you if it is not a fact, and if you say it is not, I will quit.

Q. I do not know.

Mr. Balmer: You would not claim that is true of the exhibit we put in this morning, Exhibit No. 23?

[fol. 912] A. I have not had a chance to examine that carefully.

Q. Your comparison a moment, your assertions were rather broad that the carriers in all these rate cases loaded their Washington cost showing with these terminal expenses, and I want to be sure that you are willing to qualify your answer by not including the Great Northern Exhibit No. 23.

A. I did not mean to make a strong statement in that regard. In all of the cases in which I have been involved before the Commission where operating expenses in the State of Washington were in question those ordinarily used were those supplied to the Commission in the annual report, and those expenses included all of the expenses incurred in the State of Washington, including terminal expenses.

Mr. Da Ponte: While we are harmonizing, the same thing applies as regards Northern Pacific Exhibit 18 which absolutely and altogether excluded these terminals.

A. It shows a calculation both ways as I recall.

Q. You know this log traffic is properly chargeable with some proportion, although we may reasonable differ on the basis—it should be charged with some proportion, isn't that true?

A. I think it should.

Mr. Calderhead: In the terminal expenses as we have considered it in the State of Washington, it has included not only expense in the through, the larger terminals, but expense, as generally understood, of assembling these cars from the branch lines into consolidated train loads on main lines, so that actual terminal expense which increases the operating expenses in the State of Washington, does fall entirely to the larger terminals.

A. I so understood it.

[fol. 913] Mr. Daponte: I am talking about Puget Sound Terminals.

Mr. Calderhead: That is the facts shown by reports, and they know that is true.

Mr. Daponte: You, Mr. Calderhead, had better take the stand.

Mr. Henderson: You have been testifying a great deal, Mr. Daponte!

Mr. Daponte: You do not mean to say that the log traffic—it has to be charged with terminal cost?

A. My assumption is that there would be some terminal expense which would have to be assessed against the log traffic.

Q. For instance if a train of logs originated at a small station, is there any reason why it should not be charged with the cost of originating the business, same as any other traffic? It has to be handled, and the train made up?

A. Yes, sir.

Q. You are not charging the—criticising the charge of logs originating on branch lines with a proportion of the branch line cost, same as any other?

A. I would not criticise a charge against logs business any charges incident to that business.

Mr. Balmer: As to the question that has just been under discussion—a great deal of the freight that is originated by these terminals the total expense of which you say is assigned by the carriers supposedly to the State of Washington is interstate freight, that is true, is — not.

A. I would like to answer your question, but I would not want to go off into the realm of a traffic expert to tell you about the freight movements of other kinds of traffic, because I am not a traffic [fol. 914] expert, and still I am generally familiar with the railroad business, but I would be getting into deep water if I go to talking about different kinds of freight and where it moves.

Q. From the percentages you have referred to it is quite apparent that a larger proportion of the freight handled by all these carriers, at least the Great Northern and Milwaukee and Northern Pacific is interstate freight, which would have but one terminal handling in the State of Washington?

A. A greater portion of the ton miles is unquestionably interstate freight, but the tonnage, I would not be prepared to say. I am inclined to think that the interstate tonnage of the Milwaukee is greater than the interstate. Yes, sir, that is true, 57 per cent of the total, of 1920 tonnage, handled by the Milwaukee within the State of Washington was logs, poles, posts and items of that kind.

Q. How about the Great Northern and Northern Pacific?

A. In the case of the Great Northern, that was not true. Items of logs, posts, poles intra state were only 29% of the total tonnage.

Q. My question was the proportion of the whole—we will limit the question to the Great Northern for the purpose of simplicity; what is the proportion on the Great Northern of inter and intra state freight in the State of Washington?

A. Intrastate is eighteen per cent of the total ton miles.

Q. That being true, assuming that the tonnage follows the ton miles all excepting eighteen per cent of the traffic handled by the Great Northern would have but one terminal handling in the State, the other terminal handling being in some other State?

A. Yes, sir.

Q. Whereas all of the logs are handled intra state, and have two terminal handlings in the State of Washington?

[fol. 915] A. Yes, sir.

Q. Don't the terminals of the railway companies in the State of Washington originate a great deal of freight which travels over the same line on which the logs are handled?

A. You handle a very substantial movement of logs on your main line.

Q. Is it not also true that if this line on which the logs are handled in the State of Washington did not enjoy the benefit of the heavy tonnage which the terminals in the State of Washington originate the expense per ton mile or car per mile for handling logs would be a great deal heavier?

A. I do not necessarily see that, no.

Q. It seems to me it is obvious, so I would like to have you explain that?

A. Your aggregate expense might not be nearly so heavy without this other traffic.

Q. Are you prepared to say that the aggregate expense of the terminals in the State, in the proportion in which it has been assigned to the logs in these exhibits of the carriers which you mentioned, would they outweigh and offset the reduction in the cost of handling the logs on the same line, due to the fact that that line enjoys the traffic which these terminals originate and permit to them?

A. I would not want to make any statement in regard to it.

Mr. Dudley: I will call your attention to Northern Pacific Exhibit in which they classify operating expenses on branch lines separately from the main line, excluding terminals at Seattle and Tacoma, and operating expenses upon the branch line of 39 cents per car mile, which does not include any terminal expenses and operating expenses on main line, including terminals are 38 cents [fol. 916] per car mile, how would you explain the fact that the operating expense is lower on the division including the terminals than on branch lines not including terminals?

A. I think the Northern Pacific is the person to explain their own exhibits.

Q. I understand you questioned their figures?

A. No, sir.

Q. Assuming those figures are correct, have you any explanation why the operation on branch lines——

A. No, I would not attempt to say. If you ask me to explain the business of the carriers difficulties I have quite a job on my hands.

Mr. Da Ponte: Speaking of terminals expenses; the traffic originating in Washington goes out of the State and participates in using a terminal in some other state; that terminal is useful for Washington traffic because it uses the terminal in some other States?

A. In some instances, yes, sir.

Q. You realize we have not charged to the State of Washington any part of the eastern terminal charges outside of the State?

A. Do you not charge any of that against the logs?

Q. You realize that we do not charge against Washington traffic

any part of the expense of maintaing eastern terminals outside of the State?

A. That I do not know.

Q. Don't you know how these commonly are made up?

A. Yes, sir, I am quite positive of one thing, you count all the terminal expense in the State of Washington.

Q. But we do not charge to the State of Washington any part of the terminal expenses out in other states?

[fol. 917] A. Perhaps not.

Q. If you criticise the giving Washington a great percentage of revenue than the mileage proportion, don't you have to charge it some of the terminal expense at the other end of the line outside of the State?

A. I would not think of charging traffic you got there.

Q. Which we do not do.

Mr. Henderson: Do you make any charges in the other States, between Seattle and St. Paul, do they make any charges for use of terminals in Washington?

A. I have understood not. I can not definitely answer that.

Q. In going from Seattle, interstate movement east, interstate also gets a terminal charge at Spokane, does it not?

A. Yes, sir.

Q. It gets two terminal charges in the State of Washington?

— ——.

Mr. Balmer: As regards Spokane, you do not intend to say the amount of service per train at Spokane was as much as was given at the originating point, do you?

A. You mean on through traffic?

Q. Yes.

A. No, sir.

Q. On all through traffic, there is some expense incurred at every engine terminal is there not, as at Spokane?

A. I presume so.

Q. Turning to that Exhibit 3-A, for the Great Northern Railway Company, you have chosen gross ton miles interstate $7.79, in your testimony you said that the terminal expense is 40% higher operating expense than that of the system.

A. I did not say any such thing.

Mr. Henderson: You drew it out of the air.

[fol. 918] Supervisor Cleland: We understood him not to say it.

Mr. Henderson: You asked if it was all assigned to terminals and he said no.

A. It seems to me we are wasting lots of time. The natural assumption would be that if all of the terminal expense in the State of Washington is charged to the State of Washington the result would naturally result in increasing the unit of cost of operating in the State of Washington over the system operating cost. I can not see why we are spending a day's time on it.

Q. In the column in Exhibit 3-A headed State of Washington

there is included in the expense from which this unit expense is determined, a large cost for terminals in that State?

A. Yes, sir.

Q. You have also testified that a large proportion of the business in the State of Washington is interstate, a very large percentage I believe you gave?

A. Yes, sir, a very large percentage interstate.

Q. Presuming it is all interstate, there would be only——

A. You are trying to draw me into the realm of a traffic expert.

Q. I am asking you as a cost analyst. If you state that a large proportion of traffic is interstate, if it were all interstate there would be one handling in that $7.58, cost for the Great Northern?

A. Yes, sir.

Q. On the $4.58 cost there is two terminal handlings for the system?

A. Yes, sir.

Q. I would like to refer you to the annual report of the Great [fol. 919] Northern Railway Company to the Public Service Commission of December 31, 1920, schedule 531-B at item 181, and I would like to read the average length of haul in the State of Washington and for the system.

A. If you will put your finger on the point you want me to read into the record—item 181 shows 160.34.

Q. And the revenue is what?

A. Miles hauled and revenue freight?

Q. Average haul of freight in the State of Washington, is it not?

A. Yes, sir, of revenue freight.

Q. Read the figure for the system.

A. Corresponding system figure 258.55. I would grant that without all this trouble.

Q. 160.260 approximately? Granting there is one terminal handling in the State of Washington and two for the system and if the cost of each of these terminal handlings were the same as all these in the State of Washington, which are included in the system, when you show then that under the net gross ton mile basis on average haul you would have only one terminal handling in the State, applying 160, and two terminal handlings for the system, subject to 260, it would be approximately, per thousand ton miles for terminal handling.

A. To come down to simple facts about this terminal cost, the whole Puget Sound district is a mass of large general terminals—things coming in without being assembled. The terminal facilities are large; it results in one big charge. Eliminating the length of haul, and whether one or two or a dozen terminals, that cost in the State of Washington is charged to the State of Washington, and that is all assessed against the business within the State of Washington, [fol. 920] of which the log traffic is at least 33 1/3 per cent in tonnage, and that is all I am going to say about it.

Q. Considering the expense of haul shown you in this cost of $4.48 the $7.79 charge per thousand ton miles for terminals is the same for the system as for the State?

A. If you divide it by two.

Q. And therefore the difference between $4.48 and $7.79 is not due to the terminal cost at all?

A. I do not think so. I do not like to be arbitrary about it, but it seems to me it is so plain it does not admit of very much argument. If it is not I would like to be corrected.

Mr. da Ponte: Can you explain why the difference between the Northern Pacific cost in the state and Intrastate is so much greater than the Great Northern? If it is due to terminals why do you find the difference? I am referring to Exhibit 3-A, Northern Pacific, entire system, $4.23, Great Northern $4.48, State of Washington $7.79. If this terminal situation causes that, why do you find such a big difference between the Northern Pacific and the Great Northern?

A. I would expect the operating unit of costs on the Northern Pacific to be something less than the Great Northern, without knowing.

Q. I am talking about the percentage between these two roads, interstate, both having terminals in and out of the state. If it is caused by the terminals, why do you find such a variation?

A. I do not see that your question has any application. I do not know why the operating expenses of the Great Northern are higher than the Northern Pacific.

[fol. 921] Q. You maintain that higher costs in this state is chargeable to charging the Washington terminals?

A. In some respects.

Q. If that is the case, why is there such a difference between the Great Northern and the Northern Pacific?

A. Don't you realize that eliminating terminal expense cost of the Great Northern, you very easily be very much greater than the Northern Pacific. You are not finding an analogy at all.

Q. I am asking about this. You have shown the Northern Pacific cost in the State are say 125% of the steam cost, and on the Great Northern 175% *per cent*, we will say. Why is that percentage so different on the two systems, if your theory is correct?

A. The operating costs of the Great Northern in the State of Washington, as I understand it, eliminating terminal expenses, are higher than the Northern Pacific.

Q. Of course, but that has nothing to do with the ratio between the Northern Pacific and——

The Director: I think we have had enough of this matter. We do not want to fill this record up with forty to a hundred pages on terminal charges.

Mr. Henderson: Explain Exhibit No. 4.

A. Exhibit No. 4 shows the comparative financial results from the log traffic and other freight traffic within the State of Washington in the year 1920. Before proceeding with that exhibit I want to read the note at the bottom of the exhibit, because I think there was some misunderstanding concerning my testimony in this connection in previous case. This note reads:

[fol. 922] "In brief, this table shows that during 1920, had the cost of hauling logs been the average cost of $6.274 per 1,000 gross ton miles, the four principal carriers would have made a profit overtotal operation from State log traffic of at least $696,327; and at the same time would have sustained a corresponding loss of at least $9,236,070 (14-15) on all other freight traffic handled in the State."

Q. What is that figure of $6.274?

A. That is the average cost of handling one thousand gross ton miles in the State of Washington by the four principal carriers.

Q. If the cost of handling a gross ton of logs had been the same as the average cost, the result of $696,327 would have been obtained?

A. Exactly.

Q. Had the other items, other than logs, been charged with an average cost, then the loss shown here would have been obtained? Is that correct?

A. Yes, sir. There has been a lot of criticism directed by the carriers to my apportionment of this expense on thousand gross ton mile basis and averaging them and applying them against the log traffic. In all of the exhibits which the carriers have used they have done exactly the same thing I have done.

Q. Can you indicate the exhibit by number?

A. Your correction is in order. Not all of them did.

Q. As you go along, mention them?

A. You did not let me finish. I am speaking of the general [fol. 923] method. In all of the exhibits introduced at the previous hearing in which computation was made in regard to profitableness of handling log traffic, the carriers themselves apportioned to the logs the operating expenses on a basis of one thousand gross ton miles, or at least many of them did. The resulting cost found was higher than my cost, because I have taken the state as a whole, whereas the carriers have used the western division.

Mr. da Ponte: Where logs moved?

A. I am calling attention to the fact that though this method of mine may have been criticised it is exactly the same method the carriers used.

Q. Where they apportioned the cost of log traffic, in making breakdowns, they used that?

A. Yes, sir.

Q. Do you think the O. W. & R. R. N. conditions are applicable, at large, on gross ton basis, to logs; would it be fair to carloads in the Eastern part of the State where the greater volume of traffic is handled?

A. What do I understand you to ask me?

Q. Do you mean it would be fair——

A. I am simply ascertaining the average cost of hauling within the state.

Q. You cite us some figures, and do not claim one thing or another.

A. I may before I get through. I have not had a chance to explain this exhibit yet.

Mr. Henderson: You are like the carriers; you put in a whole lot of figures and do not propose anything.

A. I would like to get a chance to talk about these things. Referring to exhibit 4, the first line shows for the principal carriers the [fol. 924] cost of freight operation within the State, which includes the largely discussed terminal cost, whatever that may be, $1.50 or more.

The second column shows total freight car miles loaded and empty; the third shows total tare ton miles, and the fourth shows total net ton miles, and the fifth line shows the total gross ton miles. Line 6 shows freight operating costs within the State of Washington during 1920 for each of the four principal carriers and the carriers combined.

It shows that the average cost of operation within the State of Washington during the year 1920 of the four principal carriers was $6.274. This is average cost within the State, and in the following lines I have computed the gross ton miles of logs, and have applied against the gross tonnage the average cost within the State, and as stated in my foot note, had the cost of hauling logs been no greater than the average unit cost of hauling all commodities within the State, then the log traffic would have produced a net revenue as shown by line 13, and the other traffic would have produced the losses as shown by line 14; the figures shown by line 14 are all red figures.

The question is, Does it cost any more to haul logs than other commodities, and if so how much?

Q. Before going further, does this exhibit show whether or not the freight within the State of Washington was carried at a loss or profit during 1920, as a whole?

A. The carriers, according to their reports, all lost money in 1920, the aggregate loss being about eight millions of dollars.

[fol. 925] Q. Have you any computations as to what the results would be on an excess cost over the average for the log cost?

A. Yes, sir. If it does not cost more than 144.6 per cent more to haul logs than it does to haul the average commodity within the State of Washington, then the log traffic during the year 1920 was exactly on the same basis as all other traffic and earned at exactly the same rate.

Q. Then under the figures shown the log traffic, by these figures you have, stood to cost about 144.6 per cent of the average cost to haul and produce revenue, which would compare with the revenue of the other traffic?

A. Exactly.

Mr. Da Ponte: You use the cost in the State of Washington $6.27 per thousand gross ton miles, which you apply to the log traffic to get this showing in the footnote?

A. Yes, sir.

Q. Do you know whether or not that cost of $6.27 in the State

represents as great a per cent of the receipts from the State traffic as it does from the log traffic?

A. I do not understand.

Q. In order to make applicable this cost figure of $6.27 to the log traffic you have got to assume that the cost of the log traffic does not consume a greater proportion of the gross receipts than does the other traffic, to get the net result of the log traffic?

A. Oh, yes, sir, in other words the assumption is that it cost no more per unit to haul logs than other traffic.

Q. I am asking whether or not you have figured that the cost of log traffic is greater proportion of receipts from freight charges than other business.

[fol. 926] A. It is apparently less proportionately, because particularly under this basis you make money on logs and lose on anything else.

Q. You estimate, to reach that result, that it costs no more on log business than other business?—if you computed the percentage of gross receipts to the log business and compared with the gross receipts due to other business——

A. We do not think along the same lines. When I am dealing with the cost of doing business I am referring to it as cost of operations, and you are calling it part of the cost of roads.

Q. Is the cost of operation a greater proportion of receipts of log traffic or any other traffic, or is it less?

A. On this basis, Mr. Da Ponte, your logging operating ratio is less than 100, and the operating ratio of other traffic is considerably in excess of 100.

Q. Suppose you made 25 per carload of logs, and 25 per carload of automobiles, does it cost you more to earn that 25 in log traffic than it does in automobile traffic?

A. I do not know.

Q. Until that has been found out you can not tell whether you are making or losing money in the log traffic?

A. I am continually convinced by the way you ask questions—I have said this computation which shows the earnings for logs, and the lines for other traffic, is made upon the primary assumption, which may not be true, that the cost of hauling logs is the same as the average cost of hauling of commodities in the State. I made the further statement that if it cost no more than 144.6 of the average cost to haul logs, then the logs are earning at exactly the same [fol. 927] rate as other traffic within the State.

Q. Do you mean you have assumed——

A. That 144.6 per cent is not assumption.

Q. You have estimated it does not cost more to handle log traffic?

A. I have not made an assumption. I have repeatedly made the statement, I have made no computation as to cost of hauling logs.

Q. Then why do you put this foot note in? Do you know whether it cost more to do business on the Tacoma Division per thousand gross ton miles, than in the State as a whole?

A. I do not.

Q. If your exhibit is correct, it results in this that the carriers show losses from all business in the State except logging business?

A. I would think that would be rather drastic.

Q. Why not?

Mr. Henderson: I object to that; he has not ever qualified as an expert on what the railroads should——

A. I have not stated the cost of hauling logs is $6.27. I have simply worked out the average cost, and have made a separate computation, which you can make, that if it cost no more than 144.6 to haul logs than it does to haul average commodities, your logs are on a parity.

Q. I still repeat if this foot note correctly shows the results, then it would be a good thing for the companies to withdraw from all of the traffic except logs. Is that indicated by your exhibit?

A. Oh, not at all. You are drawing very far fetched conclusions.

Q. Rather than losing money on all?

Mr. Henderson: We object.

Objection sustained.

[fol. 928] Mr. Balmer: The object of your figures has been first to strike an average unit cost of handling all traffic by the carriers in the State?

A. Exactly.

Q. You have not gone any further than that in any assumptions as to whether or not that unit cost is properly applicable to the log traffic?

A. I have not.

Q. Can you compute from your exhibit the total number of intrastate gross ton miles of the carriers in this state?

A. Yes, sir.

Q. Will you do that?

A. The intrastate revenue ton-miles within the State of Washington in 1920 was 811,048,546.

Q. As shown in line 8 of the Associated Log Shippers revised No. 3?

A. Yes, sir.

Q. You can compute with fair accuracy the intrastate gross ton miles by applying to that figure which you have just read, the ratio between items on lines 5 and 4 of this revised Ex. No. 4, can you not?

A. Yes, sir, it seems to be about double; that is the way it looks.

Q. That agrees with my own figures. In other words the intrastate gross ton miles of all carriers in this state were about twice the revenue ton miles shown on line 8 of Exhibit 3?

A. I think we can assume that; I would not like to be bound by that.

Q. The ratio between intrastate net and gross ton miles would be about the same as between interstate net and gross ton miles for the basis of this discussion?

A. Let us assume that for the time being.

[fol. 929] Q. That would give us a total of 1,622,000,000 gross ton miles intrastate from all carriers in Washington?

A. Yes, sir.

Q. Will you apply to that figure your unit cost of $6.27 per 1,000 gross ton miles and let us know what it shows as to the total expenses of conducting intrastate traffic?

A. In other words, you want me to first take the revenue ton miles which I have shown, and assume that the gross ton miles would be double that figure?

Q. Yes, sir.

A. Then you want me to apply to the result my calculated average cost within the State of handling 1,000 gross ton miles?

Q. Yes, sir. My figures show that would give the expense of conducting all intrastate traffic of something over ten million dollars. Can you put your slide rule in operation and state whether or not that is true?

A. Yes, sir, it would be something in excess of ten million.

Q. You show on Exhibit 3, item 3, the total revenue of all the carriers in the State from the transportation of intrastate freight of $16,806,601.

Ans. Yes, sir.

Q. If you deduct that $10,000,000 cost of conducting intrastate traffic from this item of $16,000,000 you get a net profit to the carriers in this State from intrastate operations of $6,629,000?

A. You get a difference of that much.

Q. In other words, if you would substitute the words intrastate freight, in your footnote on Exhibit 4, for the words logs, you would get approximately the result that the four principal carriers would have made a profit from the total operations of all intrastate traffic of at least $6,629,000, and at the same time would have sustained a corresponding loss of at least something like $16,000,000 on all other freight traffic handled in the State?

[fol. 930] A. I presume it is correct.

Q. In other words, if you apply the unit cost $6.27 per 1,000 gross ton miles, not to logs, but to all intrastate freight handled by all the carriers in this State, you will find that they made a profit from their intrastate operations of about 6½ million dollars, and a loss from all other operations of something like 16 million dollars?

A. By making those assumptions, calculations and insertions, I presume it is.

Q. What assumption is not strictly according to your own exhibit?

A. I do not know of any assumption that is not strictly according to my own exhibit, but I am making calculations with figures which are not my own. I will go ahead and do it, but I do not want to be bound by this testimony.

Q. If there is any way by which you can escape being bound by it, I wish you would state it.

A. What is the point?

Q. The point is just this, and I think you will admit it, that if

you take your unit cost of $6.27 per 1,000 gross ton miles and apply that not to the gross ton miles of intra state logs, but to the gross ton miles of all intrastate freight of all the carriers, you will show that they made, from all intrastate freight, profit of $6,500,000, of which logs, according to your own calculation, furnish less than half a million, and you will also show that since their total loss as starred on the next to the last line in your exhibit 4, was about $10,000,000, they must have sustained on all their interstate operations a loss of about $16,000,000.

A. Having made those assumptions, and making those calculations, it unquestionably would show that.

Recess until 9:30 a. m. October 27.

[fol. 931] October 27, 1921—9:30 a. m.

Hearing continued.

Henry L. Gray on the stand. Continuation of cross-examination.

The Director: You may proceed Mr. Henderson.

Mr. Henderson: Were you finished with your cross-examination Mr. Balmer?

Mr. Balmer: No, I am not quite through.

Mr. Balmer: I will just read the last question and answer so as to refresh your recollection?

"Q. The point is just this, and I think you will admit it, if you take your unit cost of $6.20 for 1,000 gross ton miles and applied that not to the gross ton miles of intrastate haul but to the gross ton miles of all intrastate freight of all the carriers you will show that they made from all intrastate freight a profit of $6,500,000.00, of which logs, according to your own calculation, furnished less than half a million, and you will see that since their total deficit (as starred on the next to the last line in your Exhibit 4) was about $10,000,000, they must have sustained in their interstate operations a loss of about $16,000,000."

Your answer is:

"A. Having those assumptions and making those calculations it unquestionably would show that."

Q. Now that would mean, would it not Mr. Gray, basing the question upon your own statement, that the ratio of profit to gross revenue in all intrastate operations is about 40%; whereas, the same ratio as applied to logs is only about 24%?

[fol. 932] A. I guess so Mr. Balmer. I am very anxious to answer your questions. The whole calculation that you are making seems to me somewhat like this: Presuming that I had made an estimate that the average man could run about so fast, and then you come along and state that on the basis of that calculation a one-legged man

would make very much slower time, and a man with three legs would break all known records——

Q. In other words your answer means just this, doesn't it Mr. Gray, that as a cost analyst you arrived at the conclusion that the average cost to all the carriers in the state of conducting all freight transportation in the state was $6.27 per 1,000 gross ton miles, and the most grotesque conclusion can be drawn from applying that ratio to any particular class of traffic or to all intrastate traffic, without taking into consideration the circumstances and conditions that apply especially to the character of traffic under consideration?

A. Yes, with the reservation that that calculation of the average cost per 1,000 gross ton miles of $6.274 is something more than a conclusion. You stated I had arrived at the conclusion that that was the case; that is more than a conclusion; that is arrived at by dividing one figure by another, and is substantially a fact.

Q. Of course I don't question the calculation by which you arrive at that figure but I do want to bring out and I think you have already stated it quite clearly, that to apply that unit of cost [fol. 933] to any particular class of traffic, whether it be logs or whether it be all intrastate freight, without taking into consideration how it might affect the particular class of freight under consideration, would not lead to a reliable conclusion?

A. Not unless you knew the relation borne by the cost of handling the particular commodity to the average cost as shown, you would have to know that.

Mr. Turnburke: I think I misunderstood you yesterday when you made reference to the intrastate ton mile as figured in 1907 by Mr. Calderhead and as at present reported by the carriers. Will you just state what you did say in that connection?

A. As near as I recall my answer I stated that Mr. Calderhead found in 1907 that of the total ton miles of freight hauled within the state by the Great Northern Railroad Company approximately 35% were intrastate ton miles. Now understand, I am subject to correction; that is my recollection; and as I now report the corresponding figures it shows that approximately 18% of the ton miles within the state are intrastate ton miles.

Mr. Turnburke: I misunderstood you then, I thought you stated that Mr. Calderhead in 1907 made a study of the intrastate ton miles by which he determined that those intrastate ton miles were much in excess of what the company was reporting in 1907?

A. Oh, no, not at all.

Q. I just wanted to get that clear in my mind. Now another thing I would like you to clear up is this, that 44% you were talking about yesterday, just tell me what that was and how you got it?

[fol. 934] A. That can be obtained from Exhibit No. 4. In brief my statement is: that dealing with the four principal carriers as a whole, and their entire operations within the state of Washington, that if the unit cost of handling the log traffic doesn't exceed the average unit cost of handling all traffic within the state by more

than 44.6% then the log traffic is earning at the same rate or at a greater rate than the average traffic within the state.

Q. When you say "earning at the same rate" you mean experiencing a proportionate loss do you not?

A. Exactly.

Q. You don't mean there is any net earning?

A. No.

Q. In your statement of earnings here when you use the word "net" that doesn't take into account any assignment of taxes or capital charges?

A. You are referring to Exhibit 4 now and lines 13 and 14?

Q. Yes?

A. No, it does not.

Q. Now you told me about that 144% but you didn't tell me just what figures you used in obtaining it, and I would like to know if you would be so kind as to tell me. I might say that I tried first to work it out but could not, so I would like to have that matter cleared up?

A. Well, referring to Exhibit 4, line 14, in the grand total, it shows that including the item of incidental freight revenue a part of which would accrue to the log traffic as well as other traffic, that [fol. 935] the carriers sustained a loss of $10,652,648.00, less the amount shown net for logs. Or, let's get at it in a different way——

Q. I understand you exactly, adding Items 13 and 14 together you get the net loss, is that not right?

A. Yes.

Mr. Henderson: Is that right, that you get the net loss by adding those two items?

A. Here is what you want to do, you want to take your total freight revenue within the state, other than the incidental revenue, subtract from it the total cost of operation, and you have the loss.

Mr. Turnburke: Wouldn't that be the sum of Items 13 and 14?

A. Now let me get my working sheets on that——

Q. When I say the same I mean algebraically, adding the minus and the plus together?

A. Now during the year in question the carriers as a whole had a freight operating cost of $53,840,892.00——

Q. As shown in Item 1?

A. Yes, as shown in Item 1. The freight revenue of the carriers, excluding incidental revenue, shown on Line 15, was $43,884,320.00. Now that figure is not shown on this exhibit but you can deduce it from the exhibit—no, you can't deduce it from this exhibit at all, but that is a fact; so that apparently the 1920 freight operations within the state of Washington were conducted at a loss of $9,956,572.00.

[fol. 936] Mr. Turnburke: Exactly.

A. That was a loss at the rate of $1.158 per 1,000 gross ton miles on an average; that was the average loss. Do you check that?

Mr. Turnburke: Yes.

A. Now that is what the traffic as a whole lost. Now let us as-

sume that logs are going to lose at exactly the same rate. You know how many thousand gross ton miles of logs you have. Multiply that by this loss of $1.158 and add it to the revenue obtained from logs and you will find what the log operating expense must necessarily have been in order for logs to lose at the same rate as the traffic as a whole; is that clear to you?

Mr. Turnburke: All right.

A. Now, then, having the operating expenses calculated for the log traffic, then divide that figure by the number of thousand gross ton miles of logs and you will get the re-calculated possible cost of handling logs in order to produce the same loss as the other traffic. Then find the relation between that figure and the figure of $6.274 and you will find the relation of 144.6% that I have testified to.

Q. Yes. Now in computing this cost the cost assignable to logs is largely dependent upon the total gross ton miles as computed in Item 5, is it not?

A. You mean the total cost assignable to logs—you are referring now to this particular calculation?

Q. No, I am getting back to Exhibit 4 now, the total cost assigned to logs, whatever it is on here—Item 11, $2,162,595.00, that is largely dependent upon Item 5, the total gross ton miles, isn't it? [fol. 937] A. Yes.

Q. And that any error in computing Item 5 would be reflected in that cost, would it not?

A. Yes.

Q. In computing the gross ton miles you used Item 2, "Total Freight Car Miles, Loaded and Empty" as reported by the carriers in their annual reports to the Commission?

A. Yes sir.

Q. Do you know whether that figure includes the car miles of non-revenue freight?

A. I presume that it does but I don't know.

Q. It does include it.

A. Yes?

Q. Now, granting that it includes some car miles of non-revenue freight, the number of car miles shown in Item 2 would be too large, wouldn't it?

A. No, that would have no bearing on this calculation. I am computing the costs to the carriers of operating 1,000 gross ton miles, whether it is revenue freight or non-revenue freight.

Q. Exactly, and you are getting that cost and applying it to the revenue ton miles for the log service, are you not?

A. No.

Q. You are not?

A. No; I have computed the gross ton miles of the log traffic in exactly the same way, by considering the empty car movement and non-revenue movement as well.

[fol. 938] Q. I beg your pardon, you have not considered non-revenue movement, have you?

A. Why certainly.

Q. In the assignment to logs?

A. Yes.

Q. No sir, you have not.

A. All right, I am willing to stand corrected.

Q. Now let me get straight about this Item 2 now. That includes the car miles made in revenue trains of both revenue and non-revenue freight. Now by non-revenue freight I mean the car miles of Company coal and ties and things of that sort that are moved in revenue trains.

A. If your figures showing the loaded and empty car miles as reported to the Commission in your annual report includes your non-revenue loaded and empty car miles then they are contained in my figures. I have simply taken from your reports the loaded and empty car miles and added them together.

Q. Exactly, they are contained in Item 2, but no allowance is made for the proportion of that non-revenue car miles which go along with the log traffic, is there?

A. Why should there be any allowance?

Q. Well, these cars that haul coal and fuel oil around the country don't haul any of it for the log service, is that what you would say?

A. Not at all. I don't think you understand what I am trying to get at.

Q. I admit I do not.

[fol. 939] A. I am endeavoring to ascertain the cost to the carriers of handling 1,000 gross ton miles within the state, whether it be revenue freight or non-revenue freight. What I wanted to find out was how much it cost them to handle 1,000 gross ton miles, and I arrived at the cost——

Mr. Henderson: Is there anything to indicate that it costs less to haul non-revenue freight than it does revenue freight?

A. No there is nothing to indicate it; the presumption is that on an average it costs the same.

Mr. Turnburke: There is no contention that it costs any more or less, but there is the assertion that the log service should bear its proportion of the non-revenue freight and other incidentals necessary to the operation of the road that this calculation does not take into question. In other words, this calculation if followed through is loading all the non-revenue service on to other traffic than logs, and no proportion of it has been assigned to logs——

Mr. Henderson: Ask Mr. Gray whether that is true; are you testifying?

The Witness:

A. I can't see that it would make the slightest difference. Now you have the cost of freight operation and you have a certain number of gross ton miles that you hauled during the particular period in question, and part of it, and probably a small part, would relate to non-revenue haul. Now conceding that I have taken your total gross ton miles and divided that into your cost of operation and that

I have arrived at your average operating costs per 1,000 gross ton [fol. 940] miles. Then I have used that as an average and have stated that if the cost of hauling logs is no greater than that figure, then the results which I have shown on Exhibit 4 are exactly correct. Now, then, presuming that I had been able to take out from my first divisor the non-revenue gross ton miles, I couldn't have possibly gotten any different result; my statement would be exactly the same.

Q. Would you not have had a different assignment to the log service of costs?

A. No.

Q. If the gross ton miles shown in Item 5 had been reduced by cutting out the non-revenue freight—say it had been reduced 20%, and your cost for freight operation per 1,000 gross ton miles had consequently been increased 20%, wouldn't the cost of the log service have been increased 20%?

A. Yes.

Q. And wouldn't that have been a proper assignment?

A. It might very easily be but I don't seem to be able——

Supervisor Cleland: If the gentleman has some figures which will show us that different results could be obtained by applying the method you have in mind we would like to have them.

Mr. Turnburke: I will give you those figures.

Mr. Henderson: If you deduct the total non-revenue freight tonnage wouldn't you get the right figure?

A. No.

[fol. 941] Q. That would assume that they were hauling other things, revenue freight, without costing them anything?

A. That might be one presumption. Now if I had in any way altered by divisor, my divisor being the gross ton miles, then my average cost of hauling 1,000 gross ton miles, as shown on Exhibit 4, would have changed, but it would have been higher. Then if I turned right around and applied the higher figure to the log traffic, as I have done here, my belief is I would have gotten exactly the same result as I got before. It seems to me the resultant figures would be exactly the same; at least there would not be enough difference to permit of any great argument I don't think.

Mr. Turnburke: All I wanted you to say was, that the total gross ton miles on Item 5 for all freight includes a proportion of non-revenue freight for which no allowance has been made in your figure for logs, and that granting that your method of figuring the $6.27 was correct, similarly a proportion of the non-revenue ton miles should be assigned to the logs so that the gross ton miles of the log traffic, Item 10, would be increased, thereby increasing the cost for the log service.

A. It seems to me that you want quite a lot. I think it should be apparent that when I have used as my divisor the gross ton mileage which includes the non-revenue haul that my resultant costs for 1,000 gross ton miles is less than it would have been had I eliminated the non-revenue haul. Consequently that if I had made

the elimination I would get a greater figure than $6.27. I don't [fol. 942] think it would make a bit of difference but I am frankly willing to stand corrected. I would like to see your calculation.

Mr. Turnburke: You don't think then that this non-revenue freight—that the cost of handling that should be assigned to logs?

A. Why my dear sir I have assigned it to handling logs. Didn't I just tell you that by leaving in the non-revenue freight I got a smaller cost per 1,000 gross ton miles to apply against the logs than if I had taken it out?

Supervisor Cleland: What I can't understand is, why if he had left it in in all his figures, how it has changed the result?

Mr. Dudley: It changed the result in the cost of the Milwaukee operations alone by decreasing the cost of logs $188,000, as shown in his figures here——

Mr. Turnburke: The fallacy of the development of his figures on sheet 4 lies in the fact that the total gross ton miles used in determining the average freight cost per 1,000 gross ton miles on line 6, includes non-revenue and revenue freight, while the item 12—or item 10, the gross ton miles of log traffic, includes only the gross ton miles from revenue log traffic. In other words if you had taken the gross ton miles of log traffic and the gross ton miles of silk traffic and the gross ton miles of apple traffic and the gross ton miles of other large traffic and multiplied it by $6.27, and added up those costs, instead of getting a cost of $53,000,000 as shown [fol. 943] in Item 1, you would have gotten a smaller cost. This non-revenue freight is largely cars of coal, fuel oil, ties and other material that is moving in revenue trains. Now they are moving for the log service as well as for every other service, and he has simply used them as a divisor to figure his average costs; but, when he comes to apply it to the log service he takes the gross ton miles revenue of the log service only.

Supervisor Cleland: That is what I was getting at, as to whether or not he had carried his non-revenue freight through all of his calculations and then used it as a——

Mr. Turnburke: That is what he has done. Now if he had made an assignment of the non-revenue freight to the log service the same result would probably have been obtained had he used in Item 6 or Item 5, the total gross ton miles of revenue freight only. Now in the case of the Great Northern there are two glaring errors in computing those gross ton miles. In fact there are three I might state.

The Director: It might keep the record in a little better shape if you would finish with your questions of Mr. Gray, and then take the stand.

Mr. Turnburke: You used the average tare ton of 19 tons?

A. Yes.

Q. Where did you obtain that figure?

A. From exhibits introduced by the carriers.

[fol. 944] Q. In what case?

A. In this case.

Q. What carriers?

A. The Milwaukee for one, and as I recall it I checked the figure with the Northern Pacific Exhibit.

Q. Do you not know that you could have obtained that figure accurately from the records that are filed with the Interstate Commerce Commission?

A. It is quite possible that I might have.

Q. And that in the case of the Great Northern instead of being an average tare ton of 19 tons the average weight of car is less than 18 tons.

A. Are you insinuating in any way that I have attempted to color the statement and make a misstatement?

Q. No sir, I am just asking you if you could have determined those things from the Interstate Commerce Commission records.

A. Possibly I could have. I will admit I could have obtained it from a number of sources, but I made various efforts from the files of the Department to determine that figure but could not find it; but the Milwaukee fortunately filed an exhibit in the first hearing which stated very definitely what it would be.

Q. You would have to go to the records in Washington——

A. I did the best I could.

Q. I don't doubt but what you did. You will admit you didn't have all the figures available.

Mr. Carey: I doubt very much whether this argument between [fol. 945] these two gentlemen contributes very much to the matter involved. This hearing has not lasted somewhere upwards of 10 days and leaves less than a day for the loggers to complete their case. I don't know how the other loggers feel about it but I have some witnesses I want to put on, and we should be given a reasonable opportunity. Now Mr. Gray may have stated it wright or wrong, I don't know and I don't think anybody else does from this running fire between those examining and the witness, but Mr. Gray has stated what he has done. Now if that is wrong Mr. Turnburke can go on the stand later, if there is any time left, and say wherein it is wrong. If there is any time left we ought to be given a chance to put on our witnesses.

The Director: You can have all the time required. We may have to sit all the rest of this week to do so. I think it would be better for Mr. Turnburke if you would ask your questions and avoid discussions until you take the stand yourself.

Mr. Dudley: Mr. Gray has just stated that he took these figures from some of the Milwaukee's exhibits. Will you state where?

A. If you will give me the opportunity of going over my working papers when I leave the stand I will be glad to do it. Now, understand, my recollection as to where I got those figures is just a little hazy at the present time, but I will look over my working papers and [fol. 946] endeavor to find out where I got them, but I recall I checked it from various different sources.

Supervisor Cleland: Mr. Balmer I would suggest that Mr. Turnburke prepare some sort of a supplemental exhibit showing wherein the error occurred in Mr. Gray's exhibit. I think that would get it into the record in better shape and we could give it better consideration than by reading this record all through again, if we have to.

Mr. Balmer: We will make an effort to present this as an exhibit. I will inform Mr. Turnburke as to how it shall be prepared.

The Director: Any other questions of Mr. Gray?

Mr Dudley: I understood you to say yesterday that you used gross ton figures because the carriers had used gross ton figures in their previous exhibits?

A. Why I didn't wish to convey that impression. I said that the carriers in calculating their cost of hauling the logs, in a large number of exhibits had made the assignment of operating costs to the log traffic on a gross ton mileage basis. Mr. da Ponte challenged me to produce them and I have several sheets covered with them which I will read into the record.

Mr. da Ponte: No, that is not the point; in using the figures for the state we used gross ton miles, but in using it in the division where the logs operated——

A. I may have misunderstood you——

Mr. Dudley: Now which of the carriers used gross ton miles?

A. Your road has used gross ton miles.

[fol. 947] Mr. Dudley: We only introduced that exhibit in the previous hearing on the gross ton mile basis—I mean on one exhibit, on which we undertook to make calculations for the statistical figures on Exhibit No. 5.

A. In the first hearing, if I recall correctly, you introduced 7 different exhibits——

Q. But only one purported to make any calculations.

Mr. Henderson: The exhibits are there and speak for themselves.

Mr. Dudley: I call your attention to Exhibit No. 5 and ask you if that calculation is not made on the net ton basis?

Mr. Henderson: The exhibit speaks for itself.

Mr. Dudley: We have a right if the witness makes a mistaken statement on the stand—we have a right to call attention to it and have it corrected.

A. This Exhibit No. 5 is really made on two bases. It is made on the loaded car mile and the net ton basis as well.

Q. And that was the only calculation that was introduced by the Milwaukee at the previous hearing?

A. Well, it may have been the only calculation but Mr. Nicholson introduced some 7 different exhibits, in which he showed that the log traffic was losing, and he based his assumption on the 1,000 gross ton mile basis.

Mr. Henderson: And didn't Mr. Nicholson say that that was the only way to make these exhibits?

[fol. 948] A. Well, Mr. Nicholson talked for eleven minutes without pause in which he said that was the only way in which these exhibits should be made.

Mr. Dudley: You have computed your revenues in this exhibit on the revenue ton mile basis, on Exhibit No. 3?

A. Well, Exhibit No. 3 is a statistical table in which I have endeavored to show the revenue per 1,000 net ton miles of revenue freight.

Q. Yes. Now, then, in Exhibit No. 4, where you have computed your costs, you have computed your costs on the 1,000 gross ton mile basis?

A. Yes.

Q. Why did you not use the same basis in each case?

A. Well, Mr. Dudley, I hate to take issue with so eminent a railroad man, but it seems to me——

Q. I am just asking for information, as to why you switched your basis in the one case from the other?

A. It is not a question of switching basis. Now let's consider Exhibit No. 3. Exhibit No. 3 shows a comparison of revenues, and I have shown the comparison of revenues on the basis of the revenue ton mile hauled of various kinds of freight, that is a revenue proposition. I have not attempted to connect it in anyway with costs. Now when I get over to where I make a statement of costs as a distinctive part of the revenue, I have computed the costs on the basis of the 1,000 gross ton miles. I might have computed it on many [fol. 949] different bases, but if I was dealing with costs alone and comparing the costs of one road with the costs of another I would quite logically compute those costs on the basis of 1,000 gross ton miles. If I am calculating revenues for making comparisons between roads I want to know the revenue per 1,000 revenue ton miles.

Supervisor Spinning: Do you know what per cent the non-revenue freight is of the entire freight?

A. I can give what per cent the non-revenue ton miles are of the entire ton miles.

Q. You don't know?

A. No, but I can get it in a very few minutes from the Commission's report.

Mr Balmer: I can give you those figures for the Great Northern by referring to the annual report.

The Director: You might give them.

Mr. Balmer: The Great Northern annual report for 1920 shows the revenue ton miles as 819,418,933, and the non-revenue ton miles as 110,955,079. The non-revenue is 18% of the total.

Mr. Dudley: Does Your Honor wish the Milwaukee figures at the same time?

Supervisor Spinning: Yes.

Mr. da Ponte: Ours is shown by Mr. Peterson in his testimony to be 20%.

Mr. Peterson: Approximately 18½% non-revenue.

Mr. Dudley: The Milwaukee's figures for the revenue are 742,859,992; for the non-revenue freight 122,614,817 being approximately 14%.

[fol. 950] A. That is ton miles.

Mr. Dudley: Of the per cent of the non-revenue to the revenue ton miles?

A. Yes sir.

Supervisor Spinning: And the Great Northern is given on that basis?

A. Mr. Turnburke: Yes sir.

Supervisor Spinning: And so is the Northern Pacific?

Mr. da Ponte: Yes.

A. I wonder how the tonnage would compare?

Mr. Turnburke: Well you have used ton miles in this exhibit?

A. Yes, that is true. I was just wondering what the tonnage would be, what percentage?

Mr. Turnburke: We don't show the tonnage.

The Director: Are there any other questions on cross-examination?

Direct examination—continuation:

Mr Henderson: Will you take up Exhibit No. 7 now Mr. Gray?

A. Exhibit No. 7 was compiled from information obtained from the records.

Q. That is self-explanatory is it?

A. Yes sir.

Q. Any comment you desire to make on that?

A. The only comment I desire to make on it is as explained on [fol. 951] explanatory page 5, in which I stated that it covers approximately one-half of the log shipments in the state, and covers a gross revenue of approximately $2,000,000.00. That is an original table. I was sorry that I could not obtain more information, particularly from the large contract holders.

Mr. Henderson: When you say contract holders you mean those who hold contracts for certain rates with the railroads?

A. Yes.

Q. Now have you made some investigation with reference to the shipments of timber products other than logs?

A. Yes sir.

Mr. Dudley: Are you introducing Exhibit No. 7?

Mr. Henderson: They have all been introduced.

Mr. Dudley: I desire to strike out Exhibit No. 7 as incompetent and immaterial. It is incompetent because it is based entirely upon hearsay information. The carriers have laid before the Commission the figures upon which Mr. Gray's previous exhibit has been based. We have here a statement based upon hearsay information which Mr. Gray obtained from certain various reports which are not laid before us and which we have had no opportunity to examine or see. It is purely a hearsay proposition and it is not complete, it does not purport to be complete, but only reports from certain log-

gers. And we object on the further ground that it is totally immaterial and irrelevant; it can prove nothing and tend to prove nothing.

[fol. 952] The Director: The motion is denied; it will be admitted.

Mr. Balmer: I desire to make the same motion.

Mr. Henderson: We desire to strike all of Mr. Turnburke's exhibits, and in order to make the record clear we make the same motion with reference to all of the Great Northern's and all of the Milwaukee's exhibits, because all of the witnesses testified that they got the information from certain reports made by the railroads.

The Director: The motion will be denied.

Mr. Balmer: We desire to pay a tribute at this time to the well posted impartiality of the Director.

Mr. da Ponte: Can you give us the names of the firms reporting to you?

A. Yes.

Q. I wish you would do that.

Mr. Henderson: He can do it right now; they are all on file with the Commission.

Mr. da Ponte: All I want to know is who—if you will file a list of them——

Mr. Henderson: For Mr. da Ponte's benefit I would like to say that all of those reporting don't object to this——

The Director: The parties to this case are the Department of Public Works and the Carriers. A list of whose who appeared is given in the transcript of testimony.

Mr. da Ponte: The Associated Loggers appear but I would like to know who they are. I am not unreasonable in that.

[fol. 953] Mr. Henderson: You will find on file with the Commission a list of all of the loggers who reported, from which the figures Mr. Gray has made have been made up.

Mr. da Ponte: If it is on record that will be sufficient. Does that include the associated loggers?

Mr. Henderson: The Associated Loggers don't make any—these are individual members. Could we inquire from every individual over the entire state whether they belonged to the association or not?

Mr. da Ponte: You stated that Mr. Chinn could give it to us. Mr. Chinn is present and I ask you to request him to give us a copy of the list of Associated Loggers, so we will know who is appearing in the case.

The Director: I don't think that is material to us. I don't think we have power to compel them to disclose that.

Mr. da Ponte: We can put him on the stand. We have been requested to furnish a lot of information——

Supervisor Spinning: Is it your desire to know whether the loggers generally are contributing to this?

Mr. da Ponte: I don't care whether they are contrirbuting or not.

Mr. Henderson: We might just as well ask for the names of the stockholders of the Northern Pacific.

Mr. da Ponte: If you want it I can give it to you; and we are insistent on it and we are entitled to have it.

The Director: Let's proceed with the case. We are taking too much time.

[fol. 954] Mr. Henderson: Mr. Gray you have made some investigations with reference to shipping the products of the logs in the State of Washington have you?

A. Yes sir.

Q. Just explain what investigations you have made along that line?

A. I made an investigation as to the hauling of the finished product. I had heard the suggestion that the carriers after transporting the logs to the mills at what they thought was a very low cost, that they were deprived through water competition of the corresponding outgoing shipment of the finished product, and I was curious to find out whether or not that was the case, so I made an investigation and found out that that was not the case.

Q. Just state the result of your investigation on that?

A. The result of my investigation shows that for every board foot of shingles or lumber and shingles which the four principal carriers haul into the mills by rail that they haul out 2.57 board feet in the form of finished product. My investigation is based upon the statistics furnished by the United States Forest Service and the data furnished by the carriers themselves. It is very complete and I will be glad to explain it at considerable length if it is necessary to do so. [fol. 955] Mr. Henderson: We would like to have that in the record for the benefit of this cause, if you will go ahead and explain it.

A. All right, this explanation will involve a great many figures and I will try and make it slowly and must of necessity refer almost continuously to my notes which I have prepared.

The Director: Is it in the form of an exhibit?

A. Well, I could put it in the form of an exhibit if necessary.

The Director: I think that would be more convenient for the Department.

A. Very well; it is bound up in a pamphlet of notes which I have. There is nothing in the notes which I object to anyone having, except that some of them are more or less argumentative and it is possible that the carriers might object.

The Director: You may put it in and furnish copies.

(Marked Associated Log Shippers' Ex. 7-A.)

A. Yes I can do that by eliminating three pages at the close of this little pamphlet and it will leave the pamphlet then containing nothing else except this study as to the haul of the finished product to which I think the carriers would have no objection because it simply deals with the volume of the log traffic within the state as compared with other traffic.

Mr. Henderson: I think the figures as regards the log traffic as compared with the rest of it are already in the record?

A. Yes, I have dilated upon that some and shown what the timber industry means to the state of Washington, and I don't think anybody would have any objection to that.

[fol. 956] Mr. Henderson: If you do furnish a copy we could take out everything following page 11 and have it introduced?

A. Yes, I will go on and testify and then take out the pages myself and furnish it to the Carriers later on, and they can just take the last three pages out and throw them away.

Q. That is, the last three pages are purely argumentative are they; with the exception of page 15?

A. Yes, these pages, pages 12, 13, 14 and 15 were more or less in the nature of private notes I think.

Q. Page 15?

A. Well, page 15 is along with the rest of them, we might as well take them all out. Beyond that I don't think there would be any objection on the part of anyone.

Mr. Dudley: Of course we would like to be able to suggest what matter we object to, ourselves. It might be well to see how the Commission is going to proceed in order to determine whether it is objectionable or not. I don't think the jury should be furnished with evidence that counsel cannot see.

Mr. Henderson: I will cut these pages out that the carriers probably won't want in, and give the carriers——

Mr. Dudley: I suggest that we be permitted to state what shall be let in or out——

Mr. Balmer: We are more interested in what you take out.

[fol. 957] Mr. Henderson: Part of it is my brief, you will see it later.

The Director: As I understand it they are taking this matter out because they thought the carriers would object to it. If you want it left in——

Mr. Dudley: The carriers have not had an opportunity to object to it; they have not seen it.

The Director: You may let the records show that cost marketing conditions of this report were admitted.

A. Referring to pages 1 and 2 they deal with the importance of the timber and timber industry in the state of Washington. I don't think they require any explanation.

Mr. Henderson:

Q. Just point out the percentage of that to the rest of the traffic. You can do that can't you without reading the entire matter?

A. Yes. The logs, in tonnage, constitute approximately 33% of the total revenue freight within the state; and lumber constituting about 65% of the total interstate traffic from the state.

Q. The logs hauled is about 65% of the interstate traffic of this state—and timber products?

A. Yes. Of the total tonnage handled within the state of Washington in 1920, 62% were raw or manufactured forest products,

and 35% of that was logs; that is, 35% of the total tonnage of the logs.

[fol. 958] Mr. Balmer: And you went on to state that 65% of the total interstate traffic was timber products?

A. That is my understanding, that of the total interstate haul from the state of Washington, approximately 65% is lumber. Now I will state right here that I got that figure from a Government report which didn't show it as a definite figure but simply commented on that fact. Now I will stand to be corrected on that figure of 65%, but the figures showing that the log tonnage within the state was 33% are obtained from the reports to the Commission and is correct.

The Director: That 65% timber Products, that is 65% of outgoing freight?

A. Yes, the language is exactly this—perhaps I had better read it: It states that during the year 1920 there were delivered to the four transcontinental carriers serving Washington, at points within the state of Washington, approximately 21,000,000 tons of revenue freight, of which approximately 13,000,000 tons, or 62% were raw and manufactured forest products, and of which approximately 7,000,000 tons or 33% were revenue freight, were logs. Also the log haul rates are of vital importance to the lumber industry, it supplies the carriers with approximately 65% of the interstate traffic from this state. Now it is that last figure of 65% which I said I am not sure of and will stand corrected on. That I got from a discussion contained in a Government report.

Mr. Balmer: Your language would indicate that the 65% was an outgoing interstate freight rather than 65% of all interstate [fol. 959] freight-interstate traffic; now which is correct?

A. My impression is that it is 65% of the outgoing interstate, but I am not sure as to that figure and don't want to be bound by it, but the remaining figures I know to be correct.

Mr. Henderson: Now turn to page 3, where you are discussing the finished product, just state whatever you think is of importance along there that attention should be called to?

A. I am endeavoring to arrive at the relation between the board feet hauled into the mills or to tidewater by common carriers and the number of board feet of finished product hauled out by the carriers, referring to the second paragraph on page 3, and I show that during the year 1920 the logs hauled in by the four principal carriers aggregated 1,671,188 thousand board feet, or 6,919,124 tons; these figures being taken from the exhibits which have been introduced by me. In order to allow for the logs handled by the smaller common carriers which might expect to handle the finished product, as well as to allow for certain interstate shipments, let it be considered that 180,876 tons additional should be included, making the total estimated log tonnage hauled within the state in 1920 by rail common carriers other than logging railroads of 7,100,000 tons, or 1,714,874 M board feet.

Mr. Dudley: Where did you get that?

A. That is a rounding out figure in order to bring the total tonnage up to the round figure of 7,100,000 tons. In other words I [fol. 960] had the haul accurately for the four principal carriers of intrastate haul. I knew there was a small amount of interstate log haul and I also knew that scattered around there were a few common carriers that hauled logs to small mills, and inasmuch as I was going to deal in the final analysis with the lumber shipped by rail I wanted to be sure that I would make some allowance for the logs hauled by carriers other than the four principal carriers. Do I make myself clear on that? For instance on the Columbia & Puget Sound, as I recall it, there is a mill or two stuck up in the woods and the carrier will haul logs into the mill and possibly may haul some finished product out. Now I don't know that that is the case but it used to be the case, so I have simply made the additions here to the logs hauled by the four principal carriers in order to make my figures fair. Now if I eliminated the addition it wouldn't make much difference one way or the other.

Mr. Henderson: It would simply show the larger percentage hauled out?

A. Yes.

Q. Now have you made an approximation as to the percentage of different kinds of timber?

A. Yes, my first assumption was that of the total tonnage approximately—that is, of the total tonnage of logs hauled in by the carriers, approximately 10% were cedar logs. But I might state that I used that figure after consulting with the shingle department [fol. 961] of the West Coast Lumbermen's Association, and I have since seen some figures compiled by the Puget Sound Rating and Scaling Bureau which stated that the figure was nearer 20% than 10%; so I am going ahead and carry this discussion through on the 10% basis, and then I will give you the corrected figures on the basis of 20% of the logs being cedar logs instead of 10%.

Q. Now that being true you have made some computations on page 4 with reference to shingles which will be corrected also?

A. Yes, I will make the correction right through the whole discussion, due to the fact that I want to change 10% to 20%, but the change doesn't affect the condition, it only affects the difference between the lumber and shingles; the relation between the shipment of logs and the output of finished product is not affected in any way.

Supervisor Spinning: How does it affect the handling of the output? as between rail and water——

A. There is a much higher percentage of shingles shipped by rail than water. Very few shingles are shipped by water.

Mr. Henderson: Proceed.

A. Referring to page 4 it shows that of the logs delivered to the boom by rail 92% or 1,577,684 M board feet were manufactured into lumber, and that 8% or 187,178,920 board feet were manufactured into shingles. So much for that. The statistics filed by the United States Forest Service in the year 1920 show the lumber

[fol. 962] manufactured within the state of Washington during that year to have been 5,524,676 M board feet; the sales having been 5,197,470 M board feet, and of the sales 385,571 M board feet were retailed directly from the mills, that in other words were not shipped at all. 846,397,000 board feet (and bear in mind now I am referring to lumber rather than to shingles) 846,397,000 board feet of lumber were shipped by water, while the remaining 4,292,708,000 board feet were shipped by rail to all parts of the country. Now there seems to be some difference of opinion as to just how many board feet of lumber were shipped out by water in the year 1920 and in other years. There are two authorities, one is the United States Forest Service and the other is the Pacific Coast Lumber Inspection Bureau which inspects and checks all cargo shipments of lumber, and the figures for all of the years of which I have record, of these two authorities, differ. In the aggregate they seem to balance up pretty well, but all of them I think differ. So that during the year 1920 the Pacific Coast Lumber Inspection Bureau shows that instead of 846,397,000 board feet having been shipped out by water that there was something in excess of that, or a little over a billion feet; so, in order to be fair and to make some allowance for both sides we have taken the mean of the two figures as representing the outgoing water shipments of lumber, or 931,604,867 board feet, and that is a greater water shipment than any year of which we have record. So that you might say that the water shipments for 1920 were greater than during any previous year, and I think that statement is correct.

[fol. 963] Q. Now you can give the figures in board feet from the state of Washington?

A. Yes.

Q. And from that you deducted the board feet shipped by water?

A. Yes, and the board feet retailed from the mills.

Q. And you get what figure as the board feet shipped by rail?

A. I get for the board feet shipped by rail during the year 1920, 3,880,294,125 board feet.

Q. And what was the board feet of logs transported by rail?

A. The board feet of logs transported by the carriers for manufacture into lumber were 1,577,684,080, and the relation between the two is 2.46. In other words, for every board foot of logs hauled into the mills by rail for the manufacture of lumber, 2.69 board feet were hauled out from the mill as a finished product.

Supervisor Cleland: Are you correct on that figure, 2.46?

A. Yes, that is on the 10% basis of cedar logs. I will correct it later. Now that disposes of the lumber. Now during the year 1920, or the same year I have been talking about, the Forest Service statistics show that the Washington mills manufactured 4,847,105,000 shingles; the sales being somewhat in excess of that or 4,916,752,000 shingles: Now all these Government statistics show that 70,366,000 [fol. 964] shingles were retailed from the mills, while 136,414,000 shingles were shipped by water, leaving a total of 4,709,972,000 shingles carried by rail within and from the state of Washington during the year 1920. Now that is shingles. Now on the basis of

9 shingles per board foot, which is the commonly accepted ratio, these shingles correspond to 523,330,222 board feet of cedar logs. The estimated footage of cedar logs hauled into the mills by rail, that is on the 10% basis for the purpose of manufacture into shingles, was previously shown to be 137,189,920 board feet. So that for every shingle hauled into the mills or to tidewater to go to the mills by rail in the form of logs, 3.81 shingles were hauled out as a finished product. Now then is the time I will make my correction.

Mr. Dudley: Just a question: in figuring the logs hauled in by rail you took into consideration of course only logs?

A. Yes sir.

Q. You have not taken into consideration any material shipped in by rail or otherwise in the form of shingle bolts?

A. I investigated that to the best of my ability and understand that the number of bolts are very small; that there were very few bolts shipped by rail.

Mr. da Ponte: Where is to be found anything to show the ratio between the logs shipped in and the shingles shipped out by rail?

A. That is on page 5; I just got through reading it.

Mr. Henderson: Now make your correction.

[fol. 965] A. Now, then, if my first assumption, that of the logs hauled in by the carriers 10% were cedar logs is incorrect and it should be 20%, as the Scale Bureau's records indicate, then we will make the following corrections: On page 3 on the 3rd line from the bottom, change the figure 10 to 20. On page 4 in the total at the top of the page, for lumber, change the percentage from 92 to 84, and change the number of feet for lumber to 1,440,499,160. Change the shingle percentage from 8 to 16 and change the shingle board feet to 274,379,840. There are no more changes on that page. On page 5 in the 4th line from the top change the figure 1,577,684,080 to 1,440,449,160, and in the second line below that change the figure 2.46 to 2.69. Now in the second paragraph on that page, in the third line from the close of the paragraph, change the figures 137,189,920 to the figure of 274,379,840, and in the next to the last line of the second paragraph change the figure 3.81 to the figure 1.91. Now those are all the changes that are necessary. Referring to the last paragraph on page 5 I state:

"It is possible that the exact ratio between raw material and finished product handled by rail, as shown for lumber and shingles, may differ somewhat from the actual ratios, could the same be ascertained, but it is certain that they are sufficiently correct for all practical purposes. By taking lumber and shingles combined, it is seen that the total shipment of finished product by rail amounted to 4,403,624,327 [fol. 966] board feet, whereas the corresponding in-put by rail in the form of logs was only 1,714,874,000 board feet. Therefore, considering lumber and shingles together, for every board foot hauled in by rail in the form of logs, 2.57 board feet were hauled out by rail as finished product.'

Mr. Henderson: Now turning to page 7, that is self-explanatory is it?

A. Pages 7, 7, 9, 10 and 11 contain the Governmental statistics from which I derived my figures.

Q. Is there anything further you desire to say in reference to that exhibit?

A. Nothing, except that I have used great care in preparing that exhibit. I have gone to the Forest Service and taken their records and I have gone through this thing like a fine toothed comb, and there is absolutely no question in my mind as to the accuracy of the figures, and I am unable to see how the carriers arrived at the conclusion that they were not getting the outgoing haul of the finished product.

Recross-examination.

Mr. da Ponte:

Q. So you concluded that the carriers are hauling in 2½ times as much logs as they are getting paid for by the loggers?

A. No.

Q. Well, how are the logs getting into the mills?

A. They are being hauled in by the carriers I presume.

[fol. 967] Q. Now you say they are shipping out 2½ times the feet of lumber as are contained in the logs that are hauled in?

A. Yes.

Q. How are the logs getting into the mills?

A. There are various ways; they come into the mills by water, and there may be mills adjacent to the logging operations.

Q. Exactly, so that the Carriers would get the haul from the logs that come in by water regardless of the log roads, won't they?

A. I don't know.

Q. That has no reference to it?

A. No.

Q. You are not meaning to say that the Carriers are not hauling in logs to tidewater mills which are manufactured into lumber and the lumber in those logs are going out by water?

A. Yes.

Q. The same lumber that the carriers are hauling in?

A. It may be.

Q. So that it is not at all true then that this Exhibit shows that the carriers are getting the haul on the manufactured product of all the logs that the carriers haul to the mill?

A. Well, as to designating some particular log, that is another question; I am dealing with the lumber as a whole.

Q. Certainly, and a lot of lumber moves by rafts down the Sound [fol. 968] into these tidewater mills?

A. Yes sir.

Q. And the lumber which has been hauled out by the carriers comes in large number from logs brought in by water?

A. Yes.

Q. Certainly——

A. Yes, but this simply shows that for every board foot of logs of lumber and shingles that the carriers bring in in the form of logs, that they haul out 2.57 board feet of finished product. Now where these particular logs come from or what happens to it or to a particular raft of logs that is brought in by water and shipped out by rail or that is brought in by rail and shipped out by water—I don't know——

Q. Sure, but your exhibit doesn't indicate whether the carriers are getting the haul from the logs which they themselves carry into the mill—the haul of the lumber from the logs which they themselves carry into the mill.

A. Well it may not conclusively indicate that but it certainly doesn't prove to the contrary.

Q. Well, in order to make your exhibit show anything you have to know the proportion of logs which are moved in by the carriers by rail as compared with the logs that are rafted in, and then you will see that the carriers are losing the haul on the lumber from the logs which they carry in. What is the percentage of logs hauled in by water?

A. I don't know.

Q. Then it is not reflected——

A. Yes.

Q. What is it——

[fol. 969] A. It is the very fact that you show that you haul out 2.57 board feet for every board foot that you bring in, which gives you some indication of the relative importance of the inbound shipments by rail to the inbound water shipments by water of logs that gives you an idea, but not conclusive.

Q. You have to get the logs from somewhere.

A. Isn't it just as reasonable to presume that this outgoing product which is 2.6 times the inbound product by rail—isn't it just as reasonable to presume that under those circumstances that the great bulk of the logs hauled in by rail go out by rail as finished products, as to presume the contrary, and the contrary, as I understand it, has been presumed by the carriers.

Q. As a matter of fact there is no presumption; the mills don't attempt to segregate the logs coming in by water and shipped out by water.

A. No——

Q. So the fact is, then, that your exhibit shows that more logs moved in by water, by rafts, than are moved in by the carriers, don't it, because they only moved in 1 foot to 2½ feet that they shipped out?

A. Yes, it would indicate that.

Supervisor Spinning: And isn't it a fact that many mills have their own logs adjacent to their plants?

A. Yes sir.

Mr. da Ponte: That is another proposition——

A. Yes, have their own logging railroad and log right there.

[fol. 970] Mr. da Ponte: Exactly, so that the fact is that there is nothing here to show what percentage of the logs the carriers haul into the mill that is hauled out in finished product?

The Director: What difference would it make.

Mr. da Ponte: Well, are the loggers going to claim the benefit that Puget Sound here has provided, and say that because you get our outbound traffic from logs on rafts, rafted in, that you have no complaint to make that you are hauling any logs at less than a reasonable rate, if you get the haul of the manufactured product on them. That is their contention. We say that we haul in a tremendous percentage of the logs that are hauled in and that the finished product is shipped out by water. Now the logs that the mills bring in on their own roads would be shipped in the same proportion by carrier as lumber, without regards to what the log rate is?

A. Honestly I will have to admit that you can't take a log and trace it through to see whether it goes out by rail or water. I think the general conclusion you might draw from this would be, it shows a rather heavier outbound than inbound movement, and we know in a general way that the logs that are shipped in by rail go out as finished product and a very considerable percentage more.

Q. Yes, now here, assuming that 35% of the logs handled by the Northern Pacific go to these tidewater mills, which the evidence has already shown—we will assume that for the sake of the record, in [fol. 971] round figures, the evidence is in the record, but suppose that 50% of the logs that we carry go to tidewater mills, now what percentage of the lumber is shipped by water as compared to the total per cent?

A. What percent of lumber as compared with the total per cent?

Q. Yes, give me that?

A. The lumber shipments and shingle shipments by water have materially increased since the increase in freight rates.

Q. Well, take 1920 for this purpose, the percentage shipped by water of the total shipments?

A. Turn to page 4 and it shows that the sales in the year 1920—I guess we had better deal with lumber and shingles combined?

Q. No, take the lumber.

A. It shows that the sales were 5,000,000,000 board feet, approximately, of which 846,000,000 were shipped out by water. In other words that is about 17%.

Q. Well, then, isn't it a fair inference—of course all those shipments were from the water mills?

A. I presume so. I don't see any reason for taking it part of the way by rail and part of the way by water.

Q. Yes; so of the logs carried into the mills isn't it a fair inference that that 17% carried in by rail—isn't it a fair inference that we are losing that percentage of the logs we carry in?

A. I don't know. It is my assumption that some of it is shipped out by water.

[fol. 972] Q. What percentage would you say?

A. I can't answer that. I don't know what percentage of a particular shipment goes out by water.

Mr. Henderson: Wouldn't the inference be that they not only got the 17% but a whole lot more?

A. Unquestionably.

Mr. Capron: You made no attempt to analyze the operation of any particular tidewater mill or mills?

A. No.

Mr. Dudley: The purpose of this exhibit, as I understand it is, to support the contention that the railway companies should accept a low rate on the logs in view of the fact that they receive the benefit of the long distance transportation upon the manufactured products?

A. Well I am not making any such contention as that.

Q. Is that the purpose for which you prepared this exhibit?

A. I presume that that would be the inference, that this exhibit would lead to that.

Q. That would mean then, that the manufacturer shipping the lumber product should really bear a part of the burden of bringing in the logs?

A. Well, now, that involves questions of economics that I don't think really have any bearing on the exhibit. The exhibit is pretty clear and concise.

Q. I would like to know what the purpose of it is?

A. If I try to answer that I may get to floundering around.

[fol. 973] Mr. Da Ponte: That is really a question of law.

Mr. Dudley: What is the purpose of this exhibit?

Mr. Henderson: If you read it it states its own purpose.

Mr. Dudley: I don't see any purpose except the one I have just stated.

The Director: It is stated somewhere in the exhibit, that it refutes the contention of the carriers that they don't get the haul on the finished product on as many logs as they haul.

Mr. Dudley: I assumed that was the purpose of the exhibit; I could find no other purpose. If that be the purpose then it must be presumed that the shipper of the manufactured product should bear a proportion of the cost of bringing in the logs, which might be applicable largely perhaps, or we would assume it would be, to the mill men who are manufacturing their logs into lumber. The necessary result of that is to discriminate in favor of the logger who ships his logs in and sells them on the market and doesn't manufacture them. He is compelling, under this contention, the mill man or the manufacturer to bear a part of the burden of shipping his logs into the market where he sells his logs, where he sells his logs as logs. As a legal proposition we of course will contend that that is unsound, and if that is the only purpose of this exhibit I desire to object to it as irrelevant and immaterial.

Supervisor Cleland: Doesn't the mill man pay the freight anyway and charge it to the consumer?

[fol. 974] Mr. Dudley: He probably does if he manufactures at a profit but whether the price he pays for the logs covers an additional part of the log haul or not—in other words if the logger can ship his logs in at all of course he charges the profit to the millman and

you are discriminating in favor of the logger as against the millman who manufactures his own logs by compelling the millman to bear a part of the cost of transporting the logger's logs to market.

Supervisor Cleland: I don't see that, because to build my garage I paid the freight on that lumber from the time it came out of the woods, irrespective of who shipped it.

Mr. Dudley: You are putting the burden on the lumbermen though, as against the logger.

Mr. da Ponte: As the exhibit shows, a great deal of this stuff moved in is not handled by the carrier at all, it is moved by the proprietary roads.

Supervisor Cleland: All right, but when it is competitive I pay just as much if it is moved by the logging company itself as if it were moved by a common carrier.

Mr. da Ponte: But take it as a matter of economics, a man that is logging on the water, he wants the freight rate as high as he can get it, because that fixes the price on his logs, gives him an advantage. There is an inequality there unless the traffic bears its own legitimate cost. It is just a question of law which will be argued I think at the proper time.

Mr. Henderson: I think what the Commissioner means it will be the lumber consumer anyhow. They are interested in what the man that consumes the lumber is going to have to stand.

[fol. 975] Mr. Carey: I wonder if it will be permitted by the Board—I have a witness whose testimony will take about half an hour and he is very anxious to get away this afternoon—if I could put him on now? That is agreeable to you Mr. Gray?

A. Yes.

J. L. DOUGHERTY, a witness produced on behalf of the complainants, after being first duly sworn, testified as follows:

Direct examination.

Mr. Carey:

Q. Your name is J. L. Dougherty?

A. Yes sir.

Q. You are engaged in the logging business?

A. I am.

Q. What is your firm name?

A. McNeill-O'Hearne Co.

Q. Where are your logging operations conducted?

A. On the Skagit branch of the Great Northern.

Q. And what is your haul; from where and to where are your logs hauled?

A. We are hauling now from Rockport to Anacortes, a distance of 53 miles.

Q. You have recently made a change in the location of your camp?

A. Yes sir.

[fol. 976] Q. You have just recently opened up a new camp at Rockport?

A. Yes.

Q. At the time this proceeding was started where was your camp?

A. At Birdsview.

Q. What was the distance of the haul from Birdsview to Anacortes?

A. 38 miles I believe, I am not sure.

Q. And your haul is now how far?

A. 53 miles.

Q. How extensively were you operating at the old camp, that is, what was the capacity of your camp when you were operating to capacity?

A. We had two sides but we couldn't operate to capacity because we never had cars during the time we operated there.

Q. What do you mean by two sides?

A. Two sides is an operating unit, consisting of a logging engine, and, with the newer practice, of a loading engine, and that means we had four engines operating and two crews.

Q. In other words a side in a logging camp means a unit of equipment with a crew to operate that equipment?

A. Yes sir.

Q. Now the normal output of a camp having one side is about how many cars per day, operating normally?

A. That would depend, of course, upon the show, but I would say 10 cars would probably be the average.

[fol. 977] Q. You say the Great Northern is the carrier that has been serving you?

A. Yes.

Q. How long have you been operating there?

A. We have operated there for about a year only.

Q. What other operators were logging on that branch?

A. The Puget Sound Sawmill & Shingle Company.

Q. Where is their camp?

A. At Concrete.

Q. That was a greater distance than your camp?

A. Yes sir.

Q. And where did they haul to?

A. Anacortes.

Q. A distance of how far?

A. I presume about 43 miles.

Q. And what would be the capacity of their camp?

A. I think three sides, between two and three sides.

Q. Then what other loggers were on the same run?

A. The Cedar Logging Company, at a point called Gay Spur.

Q. And they also haul to Anacortes?

A. Yes.

Q. A distance of approximately how far?

A. I presume 48 miles.

Q. And what other?
A. The Forbes Logging Company——
Q. Where is that concern?
A. Just above Van Horne.
Q. And what is the capacity of that?
[fol. 978] A. One side only.
Q. And what is the distance of their haul?
A. I don't know much about those distances. I think I mistook when I said 43 miles to Concrete; I would say that was about 42 miles, and that Nestos was probably 45 and Gay Spur about 48 miles.
Q. Anyway the exact distance is shown in the first exhibit introduced by Mr. Calderhead, showing all the log rates and distances in the state?
A. Yes.
Q. Now in your operations what kind of cars were you operating with, cars equipped with bunks or cars not equipped with bunks?
A. Unequipped cars.
Q. Have you given any consideration to the excess cost to the logger of operating with cars not equipped with bunks over the cost where cars with bunks are furnished?
A. Yes.
Q. Explain to the Commission just what elements enter into that excess cost?
A. Well, as concerns the logger, if he is furnished what is known as system cars—now the common carriers as I understand it, it is true on our branch—furnish no cars that are known as logging cars, but furnish what they term system cars, that is the ordinary flat cars. Now these are old cars generally, not new cars. They have been rebuilt; and of course we have no control over those cars. They are used when necessary to haul rock or any other commodity, and [fol. 979] they are divided up between us and are apportioned by somebody according to the supply they have on hand. Now in order to equip those system flats so that they can haul logs it is necessary to put in stakes. These stakes are hewn out of wood and the approximate size is 4 x 6 inches. Of course they are split and there is a variation in size and they are two feet long. Now there is 20 pockets on a flat but it is customary to use perhaps 14. That varies of course, depending upon the shape or the contour of the bunk log, so-called, or side log. Now in making these stakes it is necessary to select a good quality of log because it is a matter with us of getting timber that is easy to work to avoid paying the labor charges involved in manufacturing them out of timber that is knotty and which costs more to make.
Q. In other words it is cheaper in the long run to use a high quality of timber rather than to use the poorer timber to avoid the excess labor costs?
A. Oh, surely.
Q. Now have you figured out the actual expense in dollars and cents of equipping these system flats with stakes in order to make them available for the hauling of logs?

A. Well I have attempted to, but there are so many factors in it and there are only a few of course that can be reduced to money. Take, for instance, the stake or post; a 4 x 6 inch stake two feet long contains 4 feet, and assume that there are 14 on the car, and [fol. 980] there may be less on some and more on others, but I believe that perhaps 14 is the average; it will take 56 feet of No. 1 lumber to equip that car for a trip to the dump. Now that 56 feet has a value of $20.00 per thousand. In preparing that stake log you must choose your best, and every part of the operation is identical with bringing that log down to salt water. Now I am assuming that the present price of No. 1 fir logs is $22.00; I assumed that a $2.00 freight base would be fair enough. In instances it is necessary to haul a log from one place to another where the log is available and deposit it at the scene of the new landing, so-called, and then it must be unloaded and placed. The labor cost varies of course, it varies with the capacity of the men doing the work. I have assumed that $5.00 per day is the proper wage for a man who can handle that sort of log. He has to buck up the log in two foot lengths and has to then split it up, and upon that basis, assuming that any man can take care of one side—one man sometimes does and sometimes he takes care of more—I assumed that there is a labor charge of 50 cents per car. Now that is the basis on which I assumed that it costs about 27 cents per thousand feet to equip your car.

Q. That is the excess cost for the labor that is incurred up to the time the car actually starts to move from the point of origin?

A. That is true.

Mr. da Ponte: What is the cost per car?

A. $1.62.

Mr. Carey: On the basis of 7,000 feet to the car?

A. Yes.

[fol. 981] Q. That makes about 27 cents per thousand excess cost?

A. Yes, sir.

Q. Now you figured in these costs the value of the lumber consumed in these stakes. Now is it also necessary to place blocks in order to transport your logs?

A. That is not necessary because I figured the price of the No. 1 log as $20.00. I assumed that that is its market value, and it is. I assumed that there is a parity between the operation in regard to getting that to the landing and between the actual value of the logs——

Q. I guess you didn't understand me. You have figured out the amount of lumber consumed in the stakes?

A. Yes.

Q. Now is it necessary at times to use blocks in addition to stakes?

A. Oh, yes, indeed.

Q. And the lumber consumed in those blocks would be in addition to the lumber consumed in the stakes?

A. Oh, surely.

Q. And you have not made any allowance for that lumber?

A. No, I have not.

Q. Offhand could you say about how that would run, what would be the value per car of the lumber consumed in the blocks?

A. I couldn't do that very well Mr. Carey because that depends upon the bunk load. If you have smooth logs and they lay properly against the flat bottom of the car why it is seldom necessary to use any.

Q. In other words that is a variable element and you cannot very well calculate it?

[fol. 982] A. No.

Q. At any rate you have left it out of your calculation?

A. I have.

Q. Now when the car of logs gets to its destination to be dumped, is there any excess element of cost to the logger on account of the use of the staked cars?

A. There is an element of cost and a very large element of danger. Most of these dumps, of course, are so arranged that the edge of the car is up against the brow skid of the piling so that there is no room for a man to work between the brow skid and the edge of the car. Consequently it is necessary in most instances to spot the train at some point where a workman can handle those stakes, can cut them; and in that operation he just uses his judgment. He cuts as many stakes as will permit the logs to reach the place where they should be dumped without being spilled under way. It is simply a matter of experience or judgment.

Q. In other words he designs to weaken the stakes just to the point where they will barely hold the load and break when they get there; they can be easily broken when they get there?

A. Yes, that is true.

Q. Now is that an element that is easy to compute in dollars and cents?

A. It is not.

Q. But it is an actual expense that is incurred?

A. Surely.

Q. And would be in addition to the figure you have already stated?

[fol. 983] A. Yes.

Q. Now what is the element of danger in that operation?

A. Well it is a very dangerous operation. One can imagine standing beside a car and breaking the stakes that hold the logs. The opportunity to get away of course is under the car if the logs roll off——

Q. In other words the safety of the operation depends very largely upon the ability of the individual to duck under the car?

A. That is it; it reduces itself to that.

Q. You haven't attempted to reduce that to figures?

A. No. The operation works somewhat in this way; for instance at Anacortes you spot a train just this side of the dump, and generally three or four of the crew go in and cut the stakes. We don't keep their time separate.

Supervisor Cleland: You mean the train crew?

A. Oh, no, the boom crew.

Mr. Carey: Now does the use of stakes on the cars delay the equipment to any extent?

A. Yes sir.

Q. Explain that a little more fully?

A. Well, explaining the operation at the Anacortes dumps. There are two dumps there, so called, one is called the log rollway or old dump and the other is known as the new dump. The new dump hasn't capacity enough to care for all the logs that come over the dump. Now the operation there was to put in 15 cars I believe, or [fol. 984] to spot 15 cars just outside of the dump. The boom crew then would cut those stakes and put the logs in, and fighting these stakes that were not cut properly delayed the train, until the logs were unloaded. Then if necessary the train cut off and the switch engine came down to make the second switch and the same operation was repeated.

Q. In other words the use of the staked cars involves at least one additional movement of the train and one additional stop of the train?

A. Yes, surely.

Q. And those switches or movements would be avoided by the use of the bunk cars?

A. Yes, indeed. There is another material charge there. In an effort to obtain more cars for service we arranged to dump at night at Anacortes, because we wanted cars and the railroad couldn't give us the cars. We put some arc lights at the dump and unloaded at night, and you can well understand how dangerous that would be, cutting stakes at night. Now had we had bunk cars the delay would have been very immaterial as against the staked cars. For instance we might assume that we could unload that train and get the train back to our camp with using only two-thirds of the number of cars that were necessary under the old scheme, and we paid the bill.

Supervisor Spinning: What is the relative hazard in the two operations?

A. Why there is practically no hazard when bunks are used. The patent bunk is dropped from the side opposite the boom.

[fol. 985] Supervisor Spinning: Opposite the dump?

A. Yes.

Mr. Carey: So that there is no cahnce of the operator being struck by the logs rolling off?

A. No, because most of the dumps have a raised rail and he is on the side of the raised rail. Now another matter of time that is consumed in dumping is occasioned by rough logs. You understand that when bunks are used there are two bunks on a car, over the end sills, or over the bolster, rather, and they have a relatively sharp shoulder and a small bearing surface. Now on a flat car any surface that comes in contact with the bottom—there are no bunks on it of any nature, and you can imagine what it would mean to apply a jack against any of these logs with a relatively small friction surface——

Supervisor Cleland: How high are the tops of the patent bunks from the floor of the car?

A. I don't know exactly but I imagine about 8 inches.

Mr. McCaustland: 11½ inches.

Mr. Carey: The surface bearing of the bunks?

A. Yes.

Q. Now have you given any consideration to this thought, as to whether taking carloads as they run it is possible to load a greater load on the cars equipped with bunks than on the cars not so equipped?

A. Oh, yes. I have not by my own experience but it is certainly true that they can be loaded to better advantage.

Q. Now explain just how that comes about?

A. Well, assume that you get a rough log for a bunk log, and by [fol. 986] bunk log I mean that log that is on the bottom, that is bearing upon the bunk. Now there is only two small shoulders or points of contact between that bunk and the log; all rough surfaces are in contact with nothing; whereas on a flat car all of these rough surfaces must be compensated for by blocks or by stakes. Assume that you get a crooked log on a flat and it is a pretty difficult matter to load much of a load.

Q. In other words the log that you call the bunk log, the one that comes into direct contact with the stakes, the entire body of that log is confined within the stakes?

A. Yes.

Q. Because the stake is 2 feet high or thereabouts?

A. That is not quite true; it is not always true; it depends upon the contour of the log. If that is up 2 feet why the swell of the log will go out in any event.

Q. But on the bunk cars, the dogs or whatever it is that holds the logs on the car, are out at the extreme end of the bunk?

A. Yes.

Q. And that permits a greater overhang of the log?

A. Oh, yes. But there is this additional feature to be considered too, of course, that you can almost feel sure that your load will ride on the bunks but you are not quite sure about the stakes.

Q. At any rate by spreading the bottom tier out it permits you to [fol. 987] build up a larger load or put on a greater load clear to the top?

A. Yes.

Q. Now does this make any *practical* difference in actually loading up to your minimum?

A. Yes.

Q. The usual minimum I think, prevailing on the Great Northern is 7,000 feet; now is it difficult at times to actually load to that minimum when you are using staked cars?

A. Well, we have not reached the minimum yet.

Q. You mean as you operate, the logs as they run do not load to the minimum?

A. They don't.

Q. They fail to reach the minimum by about how much per car?

A. I would say about 500 feet.

Q. What is your rate now?

A. I just learned yesterday I have a new rate from Rockport——

Q. I am talking about your old agreement?

A. That was $2.50.

Q. $2.50 per thousand?

A. Yes.

Q. So that it makes a very considerable difference on a year's business?

A. Indeed it does.

[fol. 988] Mr. Dudley: What minimum have you there?

A. 7,000 feet.

Mr. Carey: Now, Mr. Dougherty what objections are there from the standpoint of the logger of equipping, or to himself putting bunks on the cars?

A. Well the objection is to placing your property in the hands of some other person, beyond your control.

Q. In operating one side to capacity you require, of course, 10 cars each day, to load?

A. Yes.

Q. And that of course means that there are other cars in transit, either loaded or empty?

A. In logging on that scale it will take three sets of cars, one in the woods, one at the dump and one on the way.

Q. And if the individual logger puts the bunks on those 30 cars then his equipment is on the railroad company's cars and he has no control over the car?

A. Absolutely none.

Q. Would this make any difference, particularly in times of car shortage?

A. It would make quite a serious difference. The practice has been for some companies to put on bunks and others to get along without them; but in times of car shortage, assuming we had a surplus of cars, or not a surplus but an adequate supply, larger than another branch, why they would take our cars and give them to this branch which was larger than we were; so that would be equipping cars with bunks for another fellow's operation.

Q. In other words they not only would take them but under the [fol. 989] law they are compelled to make an equal distribution of cars?

A. That is my understanding of it, yes.

Q. Now have you ever had any negotiations with the Great Northern Railway Company relative to equipping of cars with bunks; in other words have they ever made any requirements to that effect?

A. Yes, sir.

Q. Explain what the circumstances are?

A. When we started operating at Birdsview it was necessary for us to sign a contract with the Great Northern Railroad that we would equip 10 cars with bunks.

Q. You say it was necessary, did they make that condition?

A. Yes, sir. I talked the matter over with Mr. O'Neill, and we were naturally very anxious to get into the logging business as fast as we could, and the mills needed logs, and it was made absolutely a condition precedent to their entertaining our demand for a spur

that I sign the contract providing that we would equip 10 cars with bunks. I signed that contract.

Q. Were the cars ever equipped?

A. No, they were not, the cars were so short that they couldn't release them to us to become equipped.

Q. That is after they made this agreement then they didn't furnish you the cars to put the bunks on?

A. No, we made a tentative contract with the bunk applier to furnish the bunks though.

[fol. 990] Q. I think that is all unless there is anything else that you think of to touch upon?

A. There is no other feature about it that I can think of.

Supervisor Spinning: What is the difference in loading with or without bunks?

A. I don't understand?

Q. What would be the difference in feet?

A. I can't say from experience, but from observation I should say that in good timber it would make the minimum at any rate, give us our 7,000 feet.

Q. Have you ever made a computation of the difference *of the difference* in time, both the loading and the unloading time, with the two different kinds of equipment?

A. No, I have not had the time, but as a matter of observation I have noticed at the Sultan Railway & Timber Company's dump it was quite a material item.

Mr. Henderson: You spoke of your inability to load to the minimum, that you ran about 500 feet under your minimum?

A. Yes.

Q. So that your rate is $2.50, and your actual transportation charges then would be very much in excess of $2.50?

A. Yes sir.

Q. So that while you have a rate the carrier is really getting much more than $2.50 out of your haul?

A. Yes.

Mr. Welsh: Isn't it a fact that the damage to a car is much greater [fol. 991] where there are no bunks than where bunks are provided?

A. Surely so, that is obvious.

Mr. Balmer: Was this contract that you signed with the Great Northern Railway Company a written contract?

A. Yes sir.

Mr. Balmer: I move to strike out all the testimony of the witness concerning that fact on the ground that it is not the best evidence. I wouldn't like to be too technical about it——

Mr. Henderson: The Commission has required the carriers to file their contracts with the shippers.

Mr. Carey: Have you a copy of the contract?

A. The contract was not a real contract, it was a letter that I was forced to sign, as I was given to understand, before the matter would be taken up with the St. Paul office.

Q. This was a letter you were required to give the carrier?

A. Yes sir.
Q. About when was that, if you recall?
A. I think it was about October, 1919.
Q. And that letter is in the possession of the Great Northern Railway Company?
A. Yes.
Q. To whom did you send it?
A. I believe it was dictated in Mr. O'Neill's office and I signed it right there.
Q. They got you right down there?
A. Yes.
[fol. 992] Q. This was a letter written in the ordinary course of business in Mr. O'Neill's office, and you signed it and left it there?
A. Yes.
Q. Did you keep a copy of that letter?
A. I think so——
Q. Could you give the approximate date of it?
A. I said about October, 1919, I believed.

Mr. Carey: If we have a copy I will produce it, and if I have the original, or Mr. O'Neill has the original I presume you can find it.
Mr. Balmer: Well, if it would be a letter it would be with the United States Federal Administration not the Great Northern. If ot was filed in 1919 it would not be in the files of the Great Northern Railway Company.
Mr. Carey: That is true. If we have a copy of the letter we will supply it.
The Director: We will adjourn until 1:30 p. m.

[fol. 993] October 27, 1921—1.30 p. m.

Met pursuant to noon adjournment.

Cross-examination of Mr. Daugherty.

By Mr. Balmer:

Q. During what proportion of the time since you commenced operating have you been operating?
A. We started the operation in January, 1920, and ceased operating in August, I believe. Started again in January, 1921, this year.
Q. What was the reason of your shutting down, was it a reason peculiar to your own operations, or general discontinuing of logging operations in the State?
A. General business condition, I should say.
Q. I just mention the fact, and suggest that while loggers might have objections to putting bunks on all these railroad cars because these cars might get into the use of some other logger during the period of car shortage, there might be similar objection from a railroad standpoint to equipping cars with patent bunks that they could not put into common use when needed. Did I understand you to say that you were able to ascertain an actual expense to your-

self of approximately $1.62 per car due to the fact that the cars were not equipped with bunks?

A. Yes, sir.

Q. And in addition to that, it is your judgment that a logger using cars not bunked cars is under some additional expense which is not reducible to figures?

A. Yes, sir.

Q. So that it would be your judgment that a difference of at least $1.62 per car would be proper in the freight rate as between cars [fol. 994] equipped with bunks and cars not so equipped?

A. Oh, no.

Q. Looking solely at the matter from the logger's standpoint?

A. No, I do not think that should be done. As a matter of fact we have been imposed upon by not bunking, not having proper facilities to move a part of te largest traffic in the State for the last six or seven years, and it would not be proper for this State to be further pioneered because of the railroad's negligence.

Mr. Dudley: Do you think a man should pay the same price for unequipped cars as for one equipped with patent bunks?

A. The situation is just this: It is manifestly of great advantage to the railroads to keep their cars equipped with bunks; for some reason unknown to any practical minded logger that I know of, the railroads have refused or have neglected and they have exacted an additional charge for bunk service, which service is manifest to any practical man, I think as of much value to the railroads.

Q. Also to the logger?

A. Well, I was speaking particularly of the railroad company, but it is also to the loggers' advantage too.

Q. Don't you think the tariff as provided, for unequipped car and a higher rate for an equipped car, is justifiable?

A. No.

Q. In other words, the railway company should be prohibited from delivering unequipped cars to the logger?

A. No, I do not think they should be prohibited; it is within the province of someone to show them that it is to their advantage to equip a car, because the- premise their rates upon the earnings, and they could produce more traffic and if one could show them [fol. 995] that they could do it cheaper by having this equipment, I do not see why you should panalize the industry.

Q. Don't you think both parties benefiting from it should share in the matter of equipping them?

A. If it could be shown, yes, sir. I think that the railroad company should furnish to the shipper proper equipment to move the traffic which they wish to move. I think he should have proper equipment for that service. It is not my province to state just what should be done, but it is manifest to any business man that if he could be shown an improvement in his logging devices, he would adopt it without charging more money for the service.

By Mr. Balmer: By the same parity in reasoning, in view of your testimony on direct examination, your statement, since, from your standpoint alone and not looking to the railroads at all, it would be

worth at least $1.62 more per car to have a car equipped with bunks than any not so equipped, why do you not think the logger should pay something for that additional service which he will get with every car he moves?

A. I do not think you should capitalize your negligence.

Q. Suppose we put it from another standpoint; don't you think we are entitled to capitalize service we provide for your benefit and which, according to your own statement will be worth $1.62 per car to you?

A. I should think that would be all right, considering all that I have said on the subject, if I got some reparation for the costs we have incurred prior to the time the bunks are put in.

Mr. Dudley: The situations are based on use of unequipped cars, [fol. 996] that is the Great Northern has never had a special rate for the use of cars equipped with patent bunks?

Mr. Henderson: I object to this going on, and should have objected to the other question. That involves a question of law. The statute compels carriers to furnish reasonable and adequate equipment, and to ask this witness what compensation they should have for reasonable and adequate equipment is a question of law rather than the opinion of a man in the logging business.

The Director: I guess they are through along that line.

Mr. Balmer: Do you get any revenue from these stakes after they have served your purpose on the car?

A. No, we do not.

Q. Do they just go to waste?

A. Some of them are taken by the people that live along the railroad company track for fuel, and others by the brakemen and operators. You must remember that most of those on one side are broken off and are of no use; on the other side they pick them up for fuel.

Q. Is it not customary for some of the loggers to save them and sell the stakes for fuel?

A. I am sure I do not know. I do not think so.

Q. It has been suggested to me.

A. I do not think it is true.

Mr. Dudley: You said those rates were originally based upon the use of the car not equipped with patent bunks, and the railway companies have to go to additional expense to fit them with patent bunks, should they not receive additional compensation for that?

Mr. Carey: This witness has been porduced as a logger to tell facts as he knows them; those facts may reflect themselves in the rate one way or the other; that is for the Commission or traffic men [fol. 997] to say. It is a matter of opinion concerning which Mr. Daugherty has not been produced as an expert. If they have any cross examination to put to him concerning what he knows as a logger, I have no objection, but to get him on the floor about things he has not testified to in direct examination, does not serve any good purpose.

The Director: I think that is a traffic question.

Mr. Da Ponte: You said the use of patent bunks protected the equipment against damage?

A. They do, yes, sir.

Q. How do you know that?

A. I presume that the best knowledge man can get is practical experience.

Q. You never repaired any of these cars?

A. Oh, no.

Q. Did you hear the testimony of car repairers that that was not the case; that the use of the bunks by centering the weight of the logs on the end sills, chews them up and in the practical of the repair shops it is the larger cost to repair cars equipped with patent bunks?

Mr. Carey: I object to that as not cross examination. It has been as surprising to me to hear this testimony as to what has ever induced the nations of the world to put armor plate on battleships for apparently wood is better.

The Director: I think the question is all right, directing the witness's attention to what has been mentioned.

A. I did not hear the testimony, but I do know this as a matter of practical observation; when one loads a car in the woods he strives first of all to get this load so it will load, and in the second place, so it will not roll off. Now he chooses his load as the best [fol. 998] he may with the material at hand.

Q. You are getting off——

Mr. Carey: Let him answer.

Q. Proceed, and I will ask the question over. Go ahead and say what you want.

A. When the loader puts on his back log he naturally looks for the best material at hand; occasionally it becomes necessary to put on a rough log. In putting on rough logs on a flat he most generally tears the deck of the flat car, in other words those knots will no doubt go through where the planking may be weak, and destroy the top of the car. In a few months time that will surely happen, out that will not be true of bunks. At the other end of the line, when he is unloading those cars, he will have to jack these logs off with lumber jacks, and he will rub that knot across the end of the car, and your decking is surely damaged.

The next matter is of sills. If the log load trips, why they roll off smoothly, in case his sticks have been properly cut; but they cannot always be properly cut; he tears out the stake pocket or else takes part of the sill. These are the two items, the sills and deck of the car.

Q. That is your conclusion?

A. From my observation.

Q. You have not any information as to actual repair cost?

A. No.

Q. You never repaired any cars?

A. Not yet.

Q. The chief idea of the patent bunk is to relieve the logger from jacking off the logs?

[fol. 999] A. No, that is not it, that is not the chief reason.

Q. One of them?

A. That is not one of them.

Mr. Carey: Did you hear what Mr. Stone of the O. W. R. R. & N. Co. said that the use of the bunks was a distinct advantage to the carriers?

A. No, I did not hear that.

Q. If Mr. Stone testified that way, that would conform to your experience?

Mr. Daponte: What do you want to argue with him for?

Mr. Carey: To duplicate your performance.

Mr. Henderson: For the benefit of the Department and for the record, I wish you would describe in as short a description as you can a logging operation; that is, how you proceed to get the logs out of the timber and to market.

A. Well, of course, the output——

Q. Not a particularly technical description, but sufficient description of a logging operation to demonstrate the fact of necessity for loggers to have cars at any time they are operating—at all times.

A. It is absolutely necessary.

Q. State to the Commission and for the record, why?

A. It is absolutely necessary to have cars. The log is lying at some distance from the spar-tree, which is constructed close to the track.

Q. What is a spar tree?

A. A tree 150 or 200 feet high, which is chosen because of its strength, guyed in six or seven different directions, and through which the main line cable from the yarding donkey goes through a block which is hung. This main line of cable goes out in the [fol. 1000] woods and to that main line is attached the log which it is wished to be loaded on a car. This log is dragged in by the yarding engine and deposited at the base of the spar tree, which is erected on the spur. The main line then goes out after another log; another engine, called the loading engine, pocks up this log and deposits it upon the car. It is impracticable to pile up many logs, their bulk is so great they become tangled up, and there is a big fire danger of piling up logs. In any event it is absolutely impracticable to pile up more than a days' operation. A logger cannot pile up his logs and he is absolutely dependent upon his capacity of loading engine, and that is determined by his cars.

Q. Whenever a logger starts operation of one side and runs his cable out to take hold of a log, by the time he gets the log in he should have a car ready to put the log on?

A. Absoluteley necessary, yes, sir.

Q. If it is not there he has to shut down?

A. Yes, sir, his daily operation is dependent upon cars.

Q. A car is an integral part of logging operations, the same as a donkey engine?

A. Yes, sir, just the same.

HENRY L. GRAY, recalled, stated:

Mr. Dudley asked me this morning to point out on some one of his exhibits the data from which I derived the tare weight of nineteen tons per car.

By Mr. Dudley:

Q. I will ask you in what exhibit you used the gross ton basis, and I call your attention to Exhibit No. 5, where you used net ton basis [fol. 1001] and loaded car basis.

A. You also challenged *by* statement that Milwaukee exhibits showed tare weight on your system was 19 tons. I have spent half an hour figuring it out. I refer to your exhibit No. 2, and referring to the second secetieon of the exhibit, which shows general statistics for the State of Washington, for the year 1920, you will note that the gross ton miles handled in the State of Washington during the year 1920 apparently exclusive of what is known as the Olympic Division, amounts to 995,167,202.

Q. Where do you find that?

A. In the second section of your Exhibit No. 2, at the bottom of the fourth column from the left.

Q. You say that is exclusive of the Olympic Division?

A. I presume it is. I beg pardon; Olympic Division, yes. Coast Division, Olympic Division and Bellingham Division. In other words the gross ton miles as I have shown from your exhibit, is 995,167,202; the net ton miles of the tonnage handled of the cars amounts to 486,637,603; consequently the difference between the two would be the tare ton miles, and that is 508,529,599. Your loaded car miles or rather your total car miles amounted to 26,-880,897, so a simple division shows that the average tare weight of your car was 18.9 tons. If you will make exactly the same computation for your system as a whole, as shown at the bottom of the page, you will find the tar- ton weight for a car of 19.7 tons; consequently in your case I thought it fair to use 19 tons. I had similar data somewhere from the Northern Pacific but I have not been able to place my hand on it. It checked with the Milwaukee figures closely and I felt safe in assuming the average tare weight of a car [fol. 1002] to be nineteen tons.

Mr. Henderson: Something was said to you on cross examination with reference to cost figures on moving log traffic. Have you been able any place to get accurate figures with reference to cost of moving log traffic or to any other particular traffic?

A. No, I have not. The testimony has been very much to the effect that it was impossible to determine the cost of handling any particular traffic.

Question objected to as immaterial, incompetent and irrelevant. Question withdrawn.

Q. Why did you use the comparative bases?

A. I had no data from which I could intelligently compute the cost of handling log traffic. The testimony of the traffic officials of the carriers was to the effect that it was impossible to compute with any degree of exactness the cost of handling any particular kind of commodities.

Q. Did you have any information from railroad officials as to the proper method of testing a rate by comparison?

A. In all of the exhibits that have been put in here which deal with the cost of handling logs, with the single exception of Great Northern Exhibit 23, in every one of the other exhibits, and there are many of them, the cost of handling log traffic was computed upon the basis of average cost per 1,000 gross ton miles of average cost per loaded car mile.

Q. Have you examined Great Northern Exhibit No. 23?

A. I have gone over it. I have not had as much time as I would like.

Q. When was the first time you saw it?

A. Shortly after it was introduced—yesterday, I think.

Q. State the particular things shown in your analysis of Exhibit [fol. 1003] 23 with reference to log rates?

A. Exhibit 23, in connection with the other Great Northern Exhibits, as I interpret it, shows that of the total loss from freight operations in the State of Washington on the Great Northern for the year, 1920, that of that total loss, that the log traffic was responsible for *only* 1.81 per cent. Of the tonnage handled by the Great Northern within the State of Washington during 1920, logs constituted 18.6 per cent.

Q. Then 18.6 per cent of the tonnage only showed what per cent of loss?

A. 1.81 per cent.

Q. What else do you find from analysis of that exhibit?

A. Right along the same line, of the revenue ton miles handled on the Great Northern in the year 1920, logs constituted 2.28 per cent, so that 2.28 % of the revenue ton miles was responsible for only 1.81% of the total loss.

Q. Is there anything else with reference to Great Northern Exhibit 23 that you have discovered by analysis that you desire to call attention to?

A. No. I might add that Great Northern Exhibit 23 directly contradicts the previous log calculations put in last hearing which shows that during a stated period a profit was made from hauling logs, and a loss from the traffic as a whole.

Q. That showing was made by what exhibits?

A. That was shown by Great Northern Exhibit 16.

Q. I do not believe that I understood you to say what Great Northern Exhibit 16 did show in tons with reference to this movement?

Objected to as incompetent, irrelevant and immaterial.

Mr. Henderson: We have a right to have that exhibit analyzed by this witness.

[fol. 1004] Objection overruled.

A. Great Northern Exhibit 16 shows computation for the months of September, October and November, 1920, which shows a profit over operation from handling logs, of $7,134. My copy was a little blurred, but I think that was the figure. During 1920 the Great Northern within the State of Washington incurred a loss; those are not revised figures—a loss of 4,577,345. That is the freight transportation loss only, which takes no account of incidental revenue. But as the increases of August 26 were not in effect until that date, I have assumed that the actual freight revenue of $10,176,076, had the 25% increase been in effect, during the year, would have been increased to $11,750,000, so that the loss during the year from operations as a whole would have been only $3,003,421, so that from the carriers' own figures, the log business as shown by that exhibit during the quarter, earned a profit of $7,134, while on the traffic as a whole during that quarter, based on that figure, the loss would have been $750,000.00. You will understand I had no exact revenue on the traffic as a whole for that particular quarter, so I simply took one fourth of the year's revenue.

Q. Did you make any investigation of the exhibits of the Northern Pacific to determine what percentage of loss the log traffic may have been responsible for as compared with what percentage of loss through other traffic might have been responsible for?

A. It was more difficult to determine in the case of the Northern Pacific, but taking Northern Pacific Exhibit 18, covering the year 1920, it shows, excluding Puget Sound terminal expense that the log [fol. 1005] traffic, which was 31.9% of the total tonnage of the carrier, was responsible for only 27.3% of the loss.

By Mr. Da Ponte: What loss?

A. Of the loss from freight operation incurred by the Northern Pacific during 1920.

Q. Have you made some computations with reference to Mr. Nichols' exhibit showing what would be a proper charge for the representative log operation?

A. Mr. Nicholson was the first witness to put in any evidence as to what might be a proper cost for handling logs.

Q. His exhibit was based upon twenty loads daily for a haul of thirty miles?

A. Yes, sir; an average load of 7,826 board feet per car, and a weight of 4.105 tons per M board feet.

Q. Comparing Mr. Nichols' calculations with what should be the revenue in a representative log haul such as he described, with what was actually received, have you obtained any results?

A. Yes, sir, in this way. Mr. Nichols calculated the total monthly cost for traffic of the kind and magnitude which he referred to was $8,344, which included investment charges and interest upon the basis of 26 days' operation, that would amount to $321.00 per day.

The daily gross ton miles handled in said operation, assuming that the average weight of Milwaukee flats to be fifteen tons—they are slightly heavier than the other carriers—the daily gross ton miles handled would be 35,945, so Mr. Nichols' estimated cost of hauling logs per M. gross ton mile, including all fixed charges, would be $8.93, and the corresponding cost, excluding fixed charges would be $6.28. Bear in mind that is the cost of handling one thousand gross ton miles as shown by Mr. Nichols within the limits of his exhibit. [fol. 1006] Q. Only twenty loads per train?

A. Yes, sir, and including such expenses as he included during the year 1920 the Great Northern received, or rather the Northern Pacific received in logging revenue per M gross ton miles—I am using that as a divisor to compare the Great Northern because—the Northern Pacific received $6.83 as compared with $6.28. The revenue which the Northern Pacific would have received had present rates been in effect during the year 1920 would have been about $7.87. The Great Northern actually received $8.40, and its present revenue, that is the revenue it would have received had the present rates been in effect, was $9.70. The Milwaukee actually received $8.82 of revenue, and the revenue which it would have received had present rates been in effect was $9.77. The O-W actually received $13.50 and the revenue which it would have received had present rates been in effect, was $15.60.

Q. Which is more than twice the amount of revenue which Mr. Nichols stated would be necessary to operate a twenty car train in the logging business, is it not?

A. Well, yes, sir, in substance. I do not know as he said that was all the expense. He simply made a computation in which he showed the representative cost of handling an operation of that kind, and I think he said there were other expenses which might be included, but for some reason he did not include them.

Q. Can you state whether or not the costs which Mr. Nichols included in arriving at his figure were costs based upon wage scales and other cost factors prevailing in 1920, or whether they were cost figures applicable since July, 1921, when the reduced wage came in? [fol. 1007] A. I understood based on 1920 figures.

Q. So if he based figures on 1921 cost they would be reduced, would they not?

A. Yes, sir, apparently.

Q. Applying the present rate as you have there would materially increase the difference between his assumed cost and what they will receive under the increased rate?

A. It would increase the difference, just how much, I do not know

Q. It would increase the difference to whatever extent the cost of operation has decreased since he made up his figures for 1920?

A. Yes, sir.

Cross-examination.

By Mr. Da Ponte:

Q. Take Northern Pacific Exhibit 18 as comparing the ratio in the log traffic; Northern Pacific Exhibit 18 shows, excluding Puget Sound terminals, net revenue of $1,308,875 from log traffic?

A. Yes, sir.

Q. And all operating expenses, without considering taxes or anything else, $1,626,922?

A. Yes, sir.

Q. What is the operating ratio between these two? In other words, what is the cost of earning $1.00 in revenue?

A. Operating ratio, 1.24.

Q. Take your figures in the State as a whole, what are your gross receipts and freight; by that 1.24 is meant it would cost the railroad, according to exhibit 18, $1.24 to earn a dollar—that is what is meant by operating ratio?

A. I do not know.

[fol. 1008] Q. Assuming those figures are correct?

A. I would say that is correct; operating ratio is 1.24; that is operating expenses divided by the operating revenue.

Q. That is equivalent to saying it cost the railroad $1.24 to earn one dollar; you paid out $1.24 for each dollar you took in?

A. Yes, sir.

Q. That does not count taxes or anything for interest on investment—that is correct?

A. Yes, sir.

Q. Now take operating ratio on business as a whole in the State.

Mr. Henderson: If there were computations made and put into the record they should go in there.

Mr. Da Ponte: He put in some grossly misleading figures.

Mr. Henderson: Disprove them then.

Mr. Da Ponte: They are correct, but they are misleading and unfair.

Mr. Henderson: We object to your using our figures.

A. Freight operating revenue earned by the Northern Pacific within the State of Washington during the year 1920, account 101 is $20,115,753.

Q. What is the expense?

A. The expense of freight operations within the State of Washington during the same period is $21,282,037.

Q. Now what is your ratio?

A. 106 approximately.

Q. You mean to say that the log traffic is making a better showing than the general traffic?

A. I do not know.

Q. Answer it, now!

Mr. Henderson: I object to this attitude on the part of counsel.

[fol. 1009] By Mr. Henderson: Ask your questions in a gentlemanly way; this witness has been a gentleman.

By Mr. Da Ponte: Yes, sir, he is a gentleman; I commend him to counsel.

By Supervisor Spinning: You are even now. Go on.

Q. Is it not true that log traffic is making a much worse showing on the face of the record than the other traffic?

A. Well, I admit this, that the operating ratio in the case of the system as a whole——

Q. No, within the State?

A. The state as a whole is more favorable than is that calculated ratio from your figures, but that does not disprove my statement.

Q. Your statement was perfectly true, that is, your figures were correct, but I am objecting to the proposition that it does not reflect or bear on the issue. You are trying to show that the logging traffic was making a better showing than other traffic, were you, by your figures?

A. What I was saying, was the fact, and this is the only thing I was showing, that 32% of your tonnage hauled within the State was responsible for only 27.3% of the loss.

Q. Was not that intended for the purpose of showing that logging was more remunerative traffic than traffic generally? If it was not, I will end the discussion here?

A. I do not know. It would not be indicative to me.

Q. Would not tell you whether it was making a better or worse showing? Why was it referred to?

A. Why not refer to it?

By Mr. Balmer: When you referred to Great Northern Exhibit 16, did you intend to approve its correctness and the correctness of [fol. 1010] the manner of its preparation, as reflecting the cost of handling the log traffic?

A. No. I made no comments on its correctness. I simply called attention to the fact that that exhibit unquestionably contradicted the subsequent exhibit; I think that is true.

Q. In fact if you attack the mode of preparation of that exhibit, anything you would say would bear with equal weight upon your own exhibit, would it not?

A. So far as the method is concerned, that would be true.

Q. In other words take exhibit 6 and Great Northern Exhibit 16 and similar exhibits produced by the carriers are correct, overlooking possible errors in figures, and uniform, would they strike an average of cost of traffic, according to the method of computation used, in our case, gross ton mile basis, in Great Northern 16 loaded mile basis?

A. Yes, sir.

By Mr. Dudley: You referred to a study made by Mr. Nichols, Milwaukee Exhibit 15, and stated that included taxes and investment charges. Have you a copy of the exhibit before you?

A. I have one somewhere here.

Q. I wish you would state what investment charge was used there for the period.

A. Mr. Nicholson computed interest at 6% on that part of the equipment which he allocated to the log business.

Q. He figured cost of the railroad cars $25,000 a mile?

A. Yes, sir.

By Mr. Henderson: Entire cost of railroad, or entire cost of log traffic?

A. That is the entire cost of the railroad, $25,000 a mile, or [fol. 1011] $750,000; he has taken certain equipment, as steel and then he has computed interest and taxes on that part of the property which he allocated to the logging traffic, and he has distributed operating expenses and steel on the same basis.

Q. Has anything developed on cross examination with reference to any figures that have been called to your attention that in any way alter the figures which you have given in your direct testimony?

A. Not materially. The Great Northern railroad did not supply its freight operating costs for the year 1920 until yesterday. I endeavored to get that from the Commission's Annual Report but found it was not included; but this company was included. The respondent has not shown the separation of operating expenses between freight and passenger as called for by the schedule for the reason that its accounts were not so kept for the year covered by that report.

Q. Accounts were not so kept, so they could make no separation?

A. Yes, sir. So that the separation was not made until this particular hearing became involved apparently.

Mr. Balmer: I think I should make a statement in fairness to myself and that is that the matter has been the subject of correspondence between Mr. Calderhead and myself, and it was called for by Mr. Calderhead, possibly for use at this hearing, although it was not so stated to me. It was called for, for the purpose of general reference on the part of the Commission, and since that was called to my attention, Mr. Calderhead's request was submitted to St. Paul and these figures were submitted to this Commission.

By Mr. Henderson: I only asked that question to show why there were these variations in the figures, was all.

[fol. 1012] A. Great Northern operating expenses for the year were somewhat less than those which I estimated. I had no segregation in the case of the Great Northern between freight and passenger expense, but I found in the case of the Milwaukee and in the case of the Northern Pacific, in each case freight operating expense in the State was approximately 75% of the total expenses in the State, and I applied that figure to the Great Northern operating expenses in the State.

In order to have absolutely correct statistical table, that is, in the cases of my Exhibit 4, it would be necessary for me to make a change in the Great Northern cost of freight operation.

Q. Let me ask you, would that change be that you used a less or a greater operating cost than what has been shown?

A. I used a greater operating cost.

Q. So that the only result of your using the operating cost which has been referred to would be to make a better showing than your

exhibit makes, in so far as the cost of operation is conferned, that is, the cost would be less than what you show?

A. Yes, sir. To give you an idea of what that showing might make, if you will refer to line 6 on exhibit 4, it will change the average freight operating cost within the State per M gross ton miles from $6.27 to $6.08; so that the change would not materially affect any of these figures and it would not alter my testimony materially in any regard.

Q. With reference to Great Northern Exhibit 16 concerning which you have been interrogated, is it or not your—or has it been your purpose to question the correctness of that any further than to simply comment upon what the exhibit shows?

A. That is all; I did not question the correctness of it at all.

[fol. 1013–1068] Q. And your proposition was that Exhibit 16 did not show the same results as Exhibit 23?

A. Yes, sir. I thought it was simply a little remarkable that exhibit 16 would show what it did; I was rather surprised to find that such a large percentage of the tonnage contributed such a small percentage of the loss; I would not attempt to analyze that to see what it meant; I was rather surprised in view of the distribution which the carrier had made of his ton miles in the State between interstate and intrastate traffic; I would have expected a somewhat different result.

By Mr. Balmer: Did you think Great Northern Exhibit 16 correctly shows the cost of handling logs in the State?

A. I do not know anything about it.

Q. You have no opinion as to whether it does or does not?

A. I have not. There is not any exhibit introduced at this hearing or any previous hearing which conclusively proves to me that it costs any more to haul logs than it does to haul the average commodity within the State.

Recess of five minutes.

[fol. 1068a–1367] In Supreme Court of Washington

[Title omitted]

Clerk's Certificate

I, C. S. Reinhart, Clerk of the Supreme Court of the State of Washington, hereby certify that the above and foregoing, together with the six volumes accompanying the same comprising in all seven volumes, of which the within is Vol. 7 pages 1069 to 1424 are a full, true and correct transcript of the record in the above-entitled cause, and that in pursuance of the writ of error heretofore received I now transmit the same together with the original writ of error and the original citation which is contained in Vol. 1 hereof.

In testimony whereof, I have hereunto set my hand and affixed the Seal of said Court, this 16th day of April, 1924.

C. S. Reinhart, Clerk of the Supreme Court of the State of Washington. (Seal of the Supreme Court, State of Washington.)

[fol. 1368] L. R. CAPRON (recalled).

Mr. Da Ponte: There has been some testimony concerning the lumber moved out with reference to logs moved in in connection with Mr. Gray's showing of statistics, have you made any investigation regarding the shipments of tide water mills since that matter was mentioned?

A. I just picked out another station of one tidewater mill on our line. I happened to have the figures in front of me. For the first 11 months of 1920 we hauled 14,100 cars of logs into that mill and we took out 950 cars of lumber and 38 cars of shingles. To the same mill for the first six months of 1921 we hauled in 6929 cars of logs and we took out 461 cars of lumber and 14 cars of shingles.

Q. Now this excess of lumber over the logs moved in to what do you attribute that?

The Director: He said that mill was the lowest——

Mr. Da Ponte: Yes, generally speaking, Mr. Gray's exhibit showed that we were moving out about 2½ feet of lumber to one foot of logs and we don't question that. I want to know what he attributes the general excess of lumber.

[fol. 1369] A. Of course, that 2½ times out, as I understand it, was the consolidated figures on all carriers. It wouldn't work out that way on our line. But of course that is accounted for by the fact that many of these mills haul their own logs and others are in a position to obtain logs by water.

Q. So that is lumber traffic which the carriers would get wholly independent of the log rates or log movements isn't it? That certain percentage?

A. Generally speaking, yes.

Q. I will ask you this: How does the rate on lumber compare, generally speaking, with regard to being compensatory with the rates on logs which is more compensatory?

A. Of course, the lumber is more compensatory, there is no question as to that. At the same time, I don't think that that is exactly a fair comparison because the lumber traffic is long haul traffic.

Q. Well, of course, it has been our position all the way through that each kind of traffic must stand on its own bottom?

A. Yes sir.

Supervisor Cleland: Is that your position now that each commodity should stand on its own bottom?

Mr. Da Ponte: That is the legal position, that is the position which the commission has taken in every case involving rates. Where the case has come up on grain we have never been allowed to take into consideration some other rates which were unduly low, but they have taken the grain and coal rates and limited them to return on that particular rate. Now when it comes to log rates it has to stand on its own bottom exactly as the other because we are not allowed to [fol. 1370] make up the deficit on some other traffic. That is our

position and the Interstate's Commerce Commission and other commissions have led the way.

Supervisor Cleland: Is that true where the raw product and the finished products are both transported by the carrier?

Mr. Da Ponte: Absolutely so.

Mr. Balmer: I would like to say for ourselves that that is exactly our position for the Great Northern. I might say—since this seems to be a logical thing to say in view of the question, that it has been held by the court that the carriers cannot be compelled to carry any class of traffic for less than a reasonable rate for that class of traffic, and that is a fully compensatory rate if the carriers choose to exact that charge. In addition to that there is a further consideration as applied to the log rates it seems to me—the logs move practically entirely intrastate, whereas the lumber moves almost entirely interstate. That body passes upon the reasonableness of one rate and another body upon the reasonableness of the other. If the rule were adopted in the present case which would require the carriers to move the logs at less than reasonable or compensatory rates it would be a descrimination against interstate traffic and it would be a descrimination that would not be readily remediable in view of the fact that one body passes as I say upon one class of rates and one upon the other.

Supervisor Cleland: What interstate traffic would low log rates be a descrimination against?

[fol. 1371] Mr. Balmer: If log rates were depressed for the purpose of fostering the movement of lumber you would have a descrimination either against one class of traffic or against the other, one would not be bearing its full share of the cost it should bear.

Supervisor Cleland: And you would limit that to interstate lumber?

Mr. Balmer: That is the only one I think of now as to logs.

Mr. Da Ponte: The evidence here shows that the Northern Pacific handles more logs than any other carrier, and the Milwaukee right on next. Now one of the roads carries hardly any logs. Now if log rates are unreasonably depressed on the theory that you make it up on the lumber traffic, then the Northern Pacific is hauling in logs for the benefit of the O. W. R. & N., which is getting the large haul on the lumber and tarrying but two logs.

Supervisor Cleland: Might it be true on the other hand that the O. W. R. & N. are hauling logs into a mill and you are hauling out the lumber?

Mr. Da Ponte: Yes, but we are hauling three times as many logs as the O. W. R. & N. but they may be hauling almost as much lumber as we are.

Supervisor Cleland: Is there any showing of that kind?

Sup. Spinning: I think you can ask the O. W. R. & N. if they are hauling more than you are.

[fol. 1372] Mr. Henderson: I might say in that connection, the history is that the Northern Pacific made these rates and developed this traffic to meet water rates, so that no other road could get that.

Mr. Da Ponte: Mr. Capron, along that line, is it a fact that the O. W. R. & N. compete with the Northern Pacific on substantially equal terms in the lumber traffic?

A. Well, the same is true of course with the other trans-continental lines, they are all competing for the lumber traffic.

Q. That is with each other?

A. Yes sir.

Q. Now, do these carriers reach all of the lumber producing centers of the state, all these four carriers?

A. Generally speaking, yes.

Q. For instance, they all reach Tacoma?

A. Yes sir.

Q. Seattle?

A. Yes sir.

Q. They reach the Grays Harbor and Willapa Harbor territory?

A. With the exception of the Great Northern.

Q. And has the Great Northern and the O. W. R. & N. running rights over the Northern Pacific lines between Vancouver, Wash. and Tacoma?

A. Yes sir.

Q. And they serve all that territory?

A. Yes sir.

[fol. 1373] Q. And is that the territory in which the lumber is produced in this state?

A. There is a large amount of lumber produced in that territory.

Q. I am not including Seattle, Tacoma and Grays Harbor and these other points where this competition exists—is that the territory in which the various roads compete on equal terms for the lumber business?

A. They compete in that territory, which is a very large territory too—Everett, Bellingham——

Q. Now in your judgment could you state, without being absolutely acurate, whether or not the O. W. R. & N. and the Great Northern get their share of this lumber traffic?

A. Well of course, we thought they got more than their share.

Q. In other words, it is simply a question of efficiency or activity of the traffic solicitors is it, which is the only thing which would be the decisive factor?

A. I wouldn't want to answer that.

Q. Well, I will put it this way—is there any reason why those other roads would not be able to participate in a fair and just proportion of the output of that territory?

A. Well, my modesty forbids me from answering that.

Q. Now with regard to this minimum, do you know of any reason why there should be a minimum established which would absolutely avoid any possibility of having to pay something in excess of the carload in the logging traffic?

[fol. 1374] A. Well, it would be very hard to do that, in case of a logging traffic, to establish any figure which could be considered a minimum, and that is due to the fact that the rates on logs are not made in the same manner that we make out other rates. On prac-

tically all other traffic we are paid for the weight which we haul. In the case of logs the compensation to the carrier is measured by board feet, and even where we are hauling what might be an average weight, the scale, owing to holes, defects, and other deductions on one car might result in a lower charge, lower footage than on another car where the actual weight hauled by the carrier was as great or greater.

Q. Is it a fact or not that on all other kinds of traffic upon which the minimum is prescribed, that from time to time the shipper has to pay an extra amount for not being able to fully load up to that minimum?

A. Well, when we fix the minimum is supposed to represent what its name indicates; that is, a minimum, and we always expect and contemplate that the average will run considerably in excess of that.

Q. But have these minimums on logs been prescribed in recognition of the ordinary theory upon which the minimum weights or rates are prescribed in other traffic?

A. To the best of my knowledge, yes.

Q. And the commission itself prescribes these minimums through investigation does it not?

A. I don't know as to that.

Q. That is the so-called Winkleman case, are you familiar with that?

A. I am not.

[fol. 1375] Q. May that be conceded in the record?

Mr. Henderson: I don't know anything about it.

Mr. Da Ponte: We will ask that a copy of the order be considered in the records.

Supervisor Spinning: What is that case?

Mr. Da Ponte: I think it was the South Tacoma Mill. We will supply a copy for the records in case it is needed.

Cross-examination.

Mr. Henderson:

Q. The time you spoke about, that lumber movement from that particular tidewater mill, that was the period during which there had been quite an advance in the lumber rates, wasn't it?

A. I gave the figures for 11 months of 1920. The last three months there was none there. Prior to that the eight months wouldn't include an advance.

Q. But wasn't there an advance made in 1918?

A. Yes there was an advance in 1918 and there was an advance in 1907 and in 1908.

Q. But there was an advance made in 1918, and your figures cover the part of 1920 and 1921.

A. Correct.

Q. And when was an advance made in 1920?

A. August 26th, 1920.

Q. And with reference to competing for lumber, is it your cus-

tom to compete as intensely as indicated for traffic to make you lose money?

A. No sir, and we are not competing or soliciting log traffic.

[fol. 1376] Q. But you have a lot of it sewed up in contracts, haven't you? Or have had for years?

A. No.

Mr. Da Ponte: And we are asking to — relieved.

Mr. Henderson: You are only asking to be relieved from rates, not the rest of it; and the Northern Pacific started out in selling its timber and sewed up that log traffic to the Northern Pacific and required that the people they sold the logs to to ship the lumber of the Northern Pacific.

A. Conditions were a great deal different when those contracts were made, we have not been making any lately.

Q. Don't the contracts that you make require that those logs be shipped over your road?

A. Only for the purpose of getting the lumber.

Q. But do you permit loggers to whom you sell timber today to move their logs any way they want to over other carriers?

A. I wouldn't like to answer that because the railway company with which I am connected is not directly selling timber, that is handled by Mr. Plummer.

Q. Of St. Paul?

A. Yes sir.

Q. And it was so handled at the time the original contracts were made, wasn't it?

A. I don't know.

Q. Now with reference to the proposition that all of these carriers are serving the same territory that could be served by one car-

[fol. 1377] rier in that territory without having four in there, couldn't they?

A. Yes sir.

Mr. Dudley: What was the advance in the lumber rate in 1918?

A. 25 per cent. was the advance with a maximum of five cents per cwt.

C. McDonough (recalled).

Mr. Balmer:

Q. In connection with the question that came up in respect to distance from Gold Bar to Delta have you determined that distance by reference to the Great Northern operating time table?

A. Yes.

Q. Now state in general how that is worked out.

A. The distance from the Wallace Falls Timber Company logging tracks to Delta?

Q. Yes.

A. The distance from the Gold Bar depot to Delta Yards Office is 29.3 miles, and the east end of the Wallace Falls Timber Company's tracks is approximately two miles east of the Gold Bar depot, which makes a total of 31.3 miles. The Delta Yard Office is east of the yard tracks in which the log trains pulled, and so that the log train engine actually travels approximately 32.3 miles in making the movement.

Q. With its load?

A. No, not with a load.

Q. All right, go ahead in making the movement.

[fol. 1378] A. Now if you include there the distance that the light engine and caboose move out of Gold Bar to take hold of the log cars on the Wallace Falls Timber Company's siding, no.

Q. What is the length of that?

A. Why, in one direction it would be about a mile and three-quarters, a mile and a half in the other direction. It would be two miles.

Q. Now make a separate statement, first of the train miles and then of the engine miles, state what they would be.

A. Well, in classifying train miles as between locomotive miles, whenever an engine handles a car it is classed as a train mile. Where the engine is alone it is classified as a locomotive mile. In this movement there would be approximately 33.3 train miles and about one additional, one mile additional locomotive mile, in each direction.

Mr. Henderson: We stipulate that the time table may be considered as a part of the record.

Mr. Balmer: All right then, we offer this as Great Northern's Exhibit #24 B.

L. W. Woodrow, a witness produced on behalf of the Great Northern Railway Company, after being first duly sworn, testified as follows:

Direct examination.

Mr. Balmer:

Q. What is your occupation?

[fol. 1379] A. General Yard Master of the Great Northern at Delta, Everett.

Q. How long have you had charge of the Delta Yards?

A. Two years.

Q. Now are you prepared to state what size of switch engine in your yard is required on an average, first, for the handling of cars of the Wallace Falls Timber Company to the dump at Weyerhauser's Mill B, and second the handling of the cars of the Sultan Railway and Timber Company to the Northern Pacific log dump?

A. Yes sir.

Mr. Henderson: We object to that as not being rebuttal, that has been put in as original testimony and we submit it is taking up time to put this in now as rebuttal. It is not proper rebuttal and it is already in the records.

Mr. Balmer: That is true, it is already in the records, in Mr. McDonough's testimony in the original case.

Mr. Henderson: Nobody denied it.

Mr. Balmer: Mr. Frost did deny the necessity of the——

Supervisor Spinning: Are you expecting to show all the straight shipments——

Mr. Balmer: I am expecting to ask first as to the cut of 25 cars from one company, and second, the cut of 25 cars from the other company; and to prove what time will be required in moving each of those cuts, or of cars into the Delta terminal, and the necessity for the time. Now you can take up either one of those first and explain what it is and what time it will take.

[fol. 1380] Mr. Henderson: We will admit that the witness will testify that it will take 4½ hours and 6 hours to do it. And that the witness will so testify.

The Director: Is that satisfactory?

Mr. Balmer: I think that is satisfactory, but for the purpose of the record let me state that I offered to prove by the witness now on the stand that to handle 25 cars of either of these companies from the time the switch engine took it after its arrival at Delta to the dump, including the other movement of the cars, for repair of bad orders and things of that kind, would be, in the case of the cars of Mr. Frost, four hours, and in the case of Mr. Irving, 6½ hours, and that that would be the necessary time.

Mr. Henderson: We will simply stipulate that the witness will so testify.

Mr. Balmer: That is all.

Mr. Henderson: Now if council will state what the other witnesses will testify to we will stipulate that.

Mr. Balmer: There was one further question I intended to ask of Mr. McDonough and he is gone. Will you please stay on the witness stand.

Mr. Balmer:

Q. It was suggested by one of the loggers yesterday that there would be no necessity for the handling of these cars to the dumps by means of your yard engine, that it would be a feasible offer issued for the road engine to take the cars to the dump, do you know whether or not that is true?

A. No sir, it would not be practical.

[fol. 1381] Q. Do you know whether or not any grievance was ever presented by the yard crew on account of a study to that effect?

A. There was.

Mr. Henderson: I object to that as incompetent, irrelevant and immaterial. What the grievance might have been that was pres-nted, the witness has testified that it is necessary to do so, and I

think it is immaterial what grievance some switching crew might have presented.

Mr. Balmer: If the court please, we are bound by the regulations and we are bound to heed the grievances of these men if their grievance covers the point mentioned, in their schedule and the question from that point of view is entirely material.

Mr. Henderson: We will stipulate they may put in a rules and regulations if they want to and we will stipulate that these very rules and regulations are the rules and regulations if they want them in.

The Director: I think with that admission it probably will be unnecessary.

Mr. Balmer: All right, the point I wanted to bring out by Mr. Woodrow, is, and I now offer to prove by his testimony, that the schedule and working regulations prescribed by the railroad labor board under which the road crews and the switching crews work, make it impossible for the road crews to handle these cars through the Delta terminal to the dump, and it is necessary to have that work done by the switching crew.

[fol. 1382] Mr. Henderson: This council will state that those rules and regulations were prescribed by the labor board we will admit that the witness will so testify.

Mr. Balmer: There was an order of the labor board to the effect that whenever the railroads were turned back that no working conditions that were in effect at the time should be altered until the Labor Board had passed upon that question.

Mr. Henderson: We have no objection to that but we do object to the statement that the labor board made those rules.

Mr. Balmer: Have you seen the actual operation of the unloading of log cars on these dumps?

A. Yes sir.

Q. Referring particularly to the unloading at Wyerhauser Mills B, are the unloaders at that place careful always to insert the hook on the end of their unloading table in the loops there provided on the top of the unloading hole for that purpose.

A. They are not.

Q. What do they use?

A. They are very careless, they will put the hook anywhere that suits their needs.

Q. Where for instance have you seen those hooks placed?

A. Well, below the grab iron, and they would break and spoil the grab iron.

Mr. Henderson: We will stipulate that they do that.

Mr. Balmer: Have you ever seen them placed in the stake pocket?

[fol. 1383] A. Yes sir.

Q. Fixed in the side sills?

A. Yes sir.

Mr. Henderson: We will stipulate that they sometimes hook them any place they can get a hold.

A. Well they will do that.

Mr. Balmer: Now does the unloading of the logs in the manner in which they are unloaded at that dump obviate the possibility of dropping the top log to the deck of the car?

A. It does not, the top log frequently drops to the bed of the car.

Q. With what effect on the car?

A. Usually it breaks the arch bars down and bends them so it will break the sill.

Q. Did you ever find your car knocked off center?

A. Yes sir. Frequently in unloading they will raise the entire bed of the car.

Q. Now some testimony has been introduced suggesting that there is an excessive breaking of brakes—on the Great Northern car because of the fact of their being placed on the side of the car, would you state whether there is room on the cars for the unloading of the logs in a manner which will not interfere with the brake staffs and cause them to be broken in the unloading operations?

A. In regard to the Gold Bar logs I would say it could be prevented. These cars are 43 feet long and the brake is on the extreme end. The logs are usually a little over 40 feet long and the brake is on the extreme end, and if all care was taken to load them to the [fol. 1384] opposite end of the car a great many brake staffs could be saved.

Q. In other words, there is room beyond the brakes staffs and the brake wheels on the deck of a 43 foot car for the loading of a 40 foot log so that it will not come in contact with the brake staff when it is unloaded?

A. Yes sir.

Mr. Henderson: If council will state what he wants to prove I can stipulate it.

Mr. Balmer: All right, I offer to prove by this witness and Mr. McCaustland who is present and ready to testify that during the period covered by Great Northern exhibit No. 21 previously introduced by him, although the Salt and the Gold Bar companies were not operating during all of that period, that the witness did send to Gold Bar and to Sultan Junction for the cars of those companies and had them brought into Delta and repaired by him as shown by this statement.

Mr. Henderson: We will stipualte that the witness will so testify. He has already testified to that exhibit.

Q. Are the cars inspected at Delta before they are sent back to Gold Bar?

A. Yes sir.

Mr. Henderson: That is all.

Mr. Balmer: Anything more Mr. McCaustland—I mean from what I have asked you, I have asked you all that I intended to.

A. No, Only I would like to bring out this point: that during the government control the Northern Pacific shops and the Milwaukee [fol. 1385] shops were consolidated with the Great Nrothern, and the

matter has been brought out here about these drop brake staffs. I cannot say that I found at that time when I was repairing the Northern Pacific or the Milwaukee cars that had these brake staffs that there was very much difference in the upkeep of the drop springstaffs and our brake staffs. It is just a case of whether the logger or the unloader wants to take any patience and take time to drop these brake staffs. It doesn't matter what kind of a brake staff it is because these drop brake staffs drop down to the side of the car and when they leave Gold Bar they have to be up in their standard positions, and our inspectors when they inspect them when they come in cannot drop them down because the I. C. C. rules claim that these brake staffs have to be operated at all times. Now the men unloading at mill B are not going to stop to drop these brakestaffs, neither does he; he merely throws these logs off and the brake staffs get damaged whether the drop brake staffs or the other.

Q. How far from the end of the car are the brake staffs on your 43 foot car?

A. Eight inches.

V. P. TURNBURKE (recalled).

Mr. Henderson: We will stipulate that the witness has exhibits and he may introduce them.

Mr. Balmer: It cannot be done that fast. We will expedite it all we can. I simply want to clear up some misapprehensions that [fol. 1386] seem to exist about this Great Northern exhibit #23. Mr. McDonough has testified to the mileage used and you will find that the mileage used on this exhibit is absolutely correct. That where the road movement concerned the movement of the cars only 31.2 miles were used, and where the movement was of the locomotive, 33.3 miles were used. Turning now to Page 2 the question has been raised as to the price of fuel oil as shown in that exhibit, $2.17. Mr. Frost testified that he could buy that oil at the present time for $1.85 a barrel. I do not doubt but what that is correct. I do know that in the oil industry the decrease in the prices has been rapid, and he testified that on July 1st the price was $2.15. You will note that this statement says that this price was based on movements of July and August, 1921 for the reason that those were the only months for which our accounting records were available, since the decrease in wages went into effect. Now as I explained in my direct testimony the item of $2.17 means the price of the oil delivered on the tender of the locomotive as called for by the Interstate Commerce Commission's rules.

Supervisor Cleland: Mr. Henderson, did you understand the testimony of the witness Mr. Frost to be that the difference between $1.85 and $2.16 or $2.17 might be made up in that way, in that freight rate, and the handling charges between the Standard Oil plant and their plant?

Mr. Henderson: Not the Standard Oil plant and the railroad

company's plant, because the Standard Oil plant is on the railroad company's line

Supervisor Cleland: Between the Standard Oil plant and the plant of the railroad several miles away.

[fol. 1387] Mr. Henderson: I will stipulate that the witness testified to that effect, that that is the cost to the railroad company.

A. I want to read that classification of operation expenses, copy of which has been filed in this case.

Mr. Henderson: It is argumentive. It has been filed in the case.

Supervisor Cleland: As far as I am concerned. I am satisfied that it costs the company $2.16 or $2.17 to put the oil into the tank.

Mr. Balmer: That being true, we don't take any more time, we just wanted to clear up what it referred to.

A. Now on this valuation, Mr. Frost testified that in a previous case the Great Northern Railroad Company introduced an exhibit on which they had assigned a cost of 88 thousand and some odd dollars per mile, and that this time the cost as shown on page 9 of exhibit 23 is $103,000. In the previous case the exact wording was "valuation of Great Northern Railroad Company per mile of main line" and the total valuation was set out as the value of the main line between Delta and Gold Bar. On page 9 the statement is made that the $103,000 is per mile including proportion of siding; and to the $88,000 figure has been added the valuation of the siding on that particular stretch of track according as determined by the State equalization committee.

The Director: Would that make the difference?

A. Yes. The figures, I remember, is $17,000 per mile and there are 26 miles of siding involved in this movement.

Mr. Henderson: You say there are 26 miles of siding for a 33 [fol. 1388] mile haul?

A. Yes. Furthermore my testimony as to the amount of additions and betterments which have been made in the State of Washington were to the effect that nearly 18 million dollars were added since 1908. That is including of course the new lines which were constructed during that time, but no proportion of this amount has been included in the 103 thousand dollar figure. Again the thought seemed to have been advanced that because the Great Northern Ry. Company was operating its train over the Northern Pacific tracks from Lowell to Delta, a distance of 3.3 miles that the mileage of this track should not be included in determining the valuation of the line under consideration, even though the Great Northern R. R. Company does operate over the Northern Pacific tracks. It is paying the Northern Pacific a proportion of the capital charges, and no amounts have been included in the cost here shown to take care of this payment. What we are endeavoring to remedy here is a typical haul, and as this haul approached the average in the state, if the haul had been made entirely over our own line the values would have been as stated. And again I want to call attention to

the fact that four sets of figures on assignment of value were introduced, three of which did not involve——

Mr. Henderson: We object to his making an argument at this time, the exhibit is established and council can make his argument when the time comes, he is taking up lots of time.

The Director: I don't know whether he is making argument or not, if he is we will ask him to desist.

Mr. Balmer: We are not making an argument.

A. I don't know what the argument is, I don't think there is any [fol. 1389] argument, but I simply want to call attention to the fact that laying aside all question of mileage in determining valuation on other basis, the assignment would have been $67,000 to Logs had the gross ton mileage basis been used, 90,000 had the car mile basis been used and 108,000 had the operating expenses been used.

The Director: I think that is in the record at least five times.

A. All right, it was in the record but it was referred to by other witnesses. There is just one other thing I want to call attention to on this exhibit and that is that on page 2 where surprise seemed to have been occasioned by the fact that 19 trains east-bound had 453 cars and 24 trains west bound had 659 cars, a difference of 200 cars—that is simply due to the fact that the others cars were handled in other trains than Sultan log trains, as testified to by Mr. Frost.

Mr. Balmer: Let me ask you a few questions with reference to operating costs and conditions on the Marcus division of Great Northern Railway Company, you have the Great Northern operating sheets for the year of 1920 before you?

A. I have the information taken from our records. The market division lies entirely east of the Cascade mountains, and it is the division over which the shippers in eastern Washington that testified last night move their logs. The other logs on the western slope are moved on the Cascade division. For the year of 1920 when these lumber men, or loggers rather, were operating in eastern [fol. 1390] Washington most of the time the average cars per train on the Marcus division—I am speaking of freight trains, was 14.8 while on the Cascade division the average cars per train was 34.1; and the net ton per train, that is, the train load of paying freight was 261 tons on the Marcus division compared with 603 tons on the Cascade division, as regards costs for comparative purposes, the freight operating cost per 100 gross ton mile was 99 cents on the Marcus division compared with 81 cents on the Cascade, an increase of 122 per cent on the Marcus division; and operating conditions in eastern Washington are entirely different from those in western Washington as regards that portion of the Great Northern over which logs move.

Mr. Henderson: We object to the witness testifying with regard to operating conditions. He only qualified as a statistician and not as operator.

Mr. Balmer: I will agree that he testify no further about the physical condition because I think the commission is informed about them anyhow; but I would want the witness to read the statistics that

are reflected in this exhibit. I think you can take up now the question of Mr. Gray's exhibit.

A. Turning to Mr. Gray's exhibit #4 you will find that the cost per 1,000 gross ton miles which he has stated in line 6 under the grand total column, and which he has stated should be corrected to $6.08 because of the reductions in the Great Northern operating expenses is correctly computed and is the operating cost per 1,000 gross ton miles. However, when this cost is applied to the gross ton miles of the log traffic determined in the manner which he has used, an inaccurate result is obtained because there has been no [fol. 1391] proportion of the non-revenue ton miles assigned to the log service. In other words, if you were to work out the gross ton miles for shipments of silk, shipments of steel, shipments of grain, and each and every commodity as Mr. Gray has done for the logs and apply those gross tons multiplied by his cost to get the total cost of the movement of the commodity and then summed all those costs you would not get the total costs of freight operations stated in the first line as $53,840,892, but would get something less than that.

Mr. Henderson: I think that Mr. Gray testified to that, that if he summed it up and eliminated the non-revenue freight that he would get this result.

A. I think when I asked Mr. Gray that question it was stated that I might so testify in rebuttal if I wanted to.

Mr. Henderson: Leave out the argument——

Mr. Balmer: The commission asked for it——

A. I have taken the reports of these four carriers as filed with this commission and drawn up therefrom the total revenue ton miles. Then turning to Mr. Gray's exhibit lines 3, 4 and 5 I determined the ratio of the gross to net ton miles. Now I made one correction in his exhibit. He testified that he had used 19 ton as the empty weight on a car, information which he obtained from the Northern Pacific. I find that on the Great Northern this figure is slightly less than 18 ton, and in making this small correction in his figures I determined the ratio of the gross to net ton miles as 1.97; in other words, approximately two gross ton miles for every net ton mile and [fol. 1392] applying that ratio to the net ton revenue ton miles I obtained the total gross ton miles based on the revenue tons handled, and which corresponds with the 8,589,000,000 figure which he has used in item 5, of approximately 7,220,000,000. The result of this correction is that the average cost per gross ton mile, allowing for the correction in the expense of the Great Northern Railroad, is $7.24 instead of $6.37. The cost of the logging operations on this basis then, as shown in line 11, instead of 2,162,395 would be 2,616,793. Now carry these figures through to the logging industry and let us see what this exhibit shows. A cost of $7.24 per thousand gross ton miles is indicated, and as stated before, the ratio of gross to net ton miles on all traffic is 1.97; then the cost per thousand net ton miles for traffic other than logs would be 1.97 times

$7.24 or $14.28 per net ton miles. In the case of the log costs of the lighter cars than the average, the ratio of the gross ton mile to the net ton mile is slightly less, being 1.91, which when applied to $7.24 gives a cost of $13.84 per thousand net ton mile for traffic of logs.

The Director: What item is that?

A. That is not shown on there, I am just going forward a little step further than he has. Now turn to page three of his exhibit. We see in line 11 that the revenue per thousand ton miles of intrastate freight, other than logs, is $22.42, and right below it that the reveneu per thousand net ton mile of intrastate logs is $15.09. Deducing from the $22.42 revenue for other intrastate freight the cost $14.28 per thousand net ton miles, a profit of $8.14 per thousand [fol. 1393] net ton miles is indicated. Deducting from the net $15.09 revenue per thousand net ton miles on intrastate logs the cost of $13.84, a net profit of $1.25 is indicated. In other words, the ratio of the net on freight other than logs is 6½ times to that of the net from the log shipments. Now taking into consideration the taxes—I treated all state taxes with a portion of the United States government taxes on the revenue basis from these four carriers. I determined that the ratio of the taxes to gross revenues in the state for the four was 14.34 per cent. Applying this tax figure to the revenue per thousand net ton miles, we have a tax assignment to freight other than logs of $3.22 per thousand net ton miles and $2.16 per thousand net ton miles, as the taxes assignable to logs, with the result that the net earnings after taking out the taxes on other intrastate freight other than logs on Mr. Gray's basis of computaion is $4.93 per thousand net ton miles compared with a loss of 91 cents per thousand net ton miles on intra-state log shipments. In addition to this it could be noted that there is a much larger average haul on the other freight from which you would naturally expect the revenue per thousand net ton miles to be less than the revenue per thousand ton miles on short haul log business. Now as to the basis Mr. Gray has used: Turning to page four again, if you compare his figures in car miles of logs, item 7, with the total car miles item 2, speaking now of older roads, you will find that had he used the car mile basis, 5½ per cent of the total expenses would have been assigned to logs; but by using gross ton mile basis items 10 and 5, considering the revision which I have just referred to, the assignment [fol. 1394] of expenses to logs is only 5 per cent. In other words, by using gross ton mile basis he assigned ten per cent less expenses to logs than he would have on a car mile basis. Now I have no other comparison with regard to the full road because the information was not set forth in Mr. Gray's exhibit, but I have for the Great Northern worked out the proportion that the log traffic bears to the total freight traffic on various basis.

Mr. Henderson: I suggest you file it as an exhibit.

A. I didn't come prepared to introduce any cost figures along this line, and for that reason didn't put this in exhibit form. I think I can read the essential things into the record with a few more words.

Mr. Henderson: We can't follow it without an exhibit, but go ahead.

A. This shows that for the Great Northern Railroad—I might say though in advance that I am not maintaining that all of the items that I am citing should be a basis for making a separation of operating expenses—I am simply citing them as representative of comparison of the log traffic with the total state freight traffic including logs. The tons of logs was 11.4 per cent; the loaded cars—not car miles—was 9.7 per cent; the train miles was 3.6 per cent. Now the way I obtained the train miles for the logs was by assuming some average number of cars per train as is shown in exhibit 23 to 26, as I remember, by dividing it into the total number of car miles of logs handled. The proportion on train mile basis, using figures as I have stated was 3.6 per cent. On the revenue basis the revenue was 3.1%. On the car mile basis, now that is loaded and [fol. 1395] empty car mile added together, the proportion of logs to haul traffic was 2.7 per cent. On the equivalent loaded car mile basis, that is using two empty cars as equivalent to one loaded car, the percentage is 2.4 per cent, and on the gros ton miles basis the percentage is 2.3 per cent for the Great Northern Ry. Now that shows that the basis he uses is absolutely the lowest basis that could have been used in asigning cost to logs. I don't know of any other basis that I could find or think of that I might set forth here as representing the comparison of the log traffic with the toal freight traffic.

Mr. Balmer: That is all I have to ask.

Mr. Henderson: That is all.

Supervisor Cleland: Why did you not include in your valuation of the Gold Bar—Everett line the net additions and betterments since 1908?

A. Why I set out to determine a figure that was as fair to the loggers as I could, and if I had got into the division of that addition and betterment I would then have gotten into the questions as to whether these additions and betterments were applied on that particular line, which could not be ascertained without a long and detailed study of the records; and in order to not lay myself open to any criticism as to increasing the figure why I simply omitted that proportion of it.

Supervisor Cleland: What are the number of miles of the Northern Pacific track that you use in your operation between Gold Bar and Delta?

[fol. 1396] A. 3.3 miles.

Supervisor Cleland: What rental do you pay annually for the use of those tracks?

A. I could not speak with definite konwledge myself. That does not come under my province, but from conferences with Mr. Balmer, I understand that we pay an interest charge on one-half of the valuation of these tracks; that is, the valuation of those tracks and any additions that may be made to them is split between the Great

Northern and the Northern Pacific on the user basis, 50-50, as I understand it.

Supervisor Cleland: Well, capitalize the amount you pay, would that give the value of $102,000?

A. I don't think it would. I don't know.

Mr. Balmer: No, it probably would not, I think I can make that explanation. Let me first offer in evidence the minutes and official proceedings of the equalization committee for 1921, which has already been referred to as an exhibit and marked.

(Marked Gt. Northern Ex. No. 25.)

A. The point I tried to make was that our average haul is about 33 miles, and that this would be the average capital charge assignable had the movement been entirely over the Great Northern Company's rails, an average distance of all log shipments in the state.

Mr. Calderhead: May I ask you how you arrived at the average weight of your equipment?

A. I arrived at the average weight of our equipment as 18 tons by subtracting the net ton miles from the gross ton miles as they are currently computed and dividing the tare ton miles by the total of car miles.

[fol. 1397] Mr. Calderhead: And the average weight of your log equipment is not as great as that?

A. No sir, so that if it were possible to make any adjustment for the fact, the cost which I have prorated would have been higher than what they have been.

Mr. Calderhead: In any of the figures you have used showing the revenue per net ton mile within the state you have used the State's proportion of the Interstate earnings?

A. I don't understand that.

Q. You have simply used the earnings from State traffic exclusive of the state's proportion of the interstate revenue?

A. Just what do you mean, in what figures?

Q. Wherever you have used the computation on net earnings.

A. I have not used it anywhere.

Mr. Balmer: Not on this——

A. Do you mean in my exhibit or Mr. Gray's?

Mr. Calderhead: I am asking for information.

A. I am trying to answer but I don't understand you.

Mr. Calderhead: Have you used—in the earnings within the state you have included in that the proportion accruing to the state of Washington of interstate traffic?

A. I don't know where I have used any. I certainly have not in any exhiibt I have used. The only figures of earnings I have used on exhibit 23 is the actual log intrastate earnings for 1921, adjusted to the increased rate base, and the only other place where I have used the revenue figures is in giving these figures which I have quoted from Mr. Gray's exhibit; and as I understand it that is intrastate revenue. That is my understanding.

[fol. 1398] Mr. Calderhead: And does not include any interstate?

A. I think it is Mr. Gray's comparison which he made between intrastate logs and the total inter and intra state while I am making a comparison between intrastate logs and intrastate other freight which I think would be a clearer analogy.

Mr. Da Ponte: I have two or three figures I want to read into the records:

Mr. Balmer: Do you want me to answer your question concerning what the monthly charges would be for the use of the Northern Pacific line?

Mr. Calderhead: Yes.

Mr. Balmer: I think in all basis of computing the capital charges we use the valuation for our main track as shown in this report of $88,432.85, and siding of $17,686.57. I find that the Nor. Pac. valuation in Snohomish County for main lines is $81,682.42 and siding $16,336.48. Now I don't know whether this movement is over the Northern Pacific main line or what is know- as the branch, do you know Mr. Calderhead?

Mr. Calderhead: I think it is main line.

Mr. Balmer: Well all right, assuming that that is correct.

Mr. Peterson: That is all branch line.

Mr. Da Ponte: It is classified as main line.

Mr. Balmer: All right, then the figure assignable to the Cold Bar movement, individually, and not taking it as typical of the state, but of course would involve a movement over our own line, would be reduced in the proportion as to mean one half of $88,432.35 and [fol. 1399] $81,682.42, and as to siding one-half of $16,336.48 and $17,686.57. In other words, we would pay one-half of the capital charges of the Northern Pacific valuation as against standing the entire capital charges of our own slightly higher valuation.

Supervisor Cleland: And all of this three miles would be considered main line?

Mr. Balmer: Well, I just understand that from the information Mr. Da Ponte gave me.

Mr. Da Ponte: It is classified there and the report has it "main line." That is all we have—that is, Sumas-Seattle line. Now Mr. Peterson, will you read those figures as to proportion of cars?

Mr. Peterson: I have some figures here for the year 1920 summarized showing intrastate state of Washington operation for the year as applied to the loaded car mile traffic only. To save time I will merely give the percentages. The number of cars handled in the state was 203,782, of which 101,725, or 50 per cent were in the log service, as compared with 49.2% of the number of tons handled in loaded cars. In the case of the tons miles only 24.3 per cent of the total loaded cars net ton miles applied to the log traffic, and 23.9 per cent to the car miles. But in the case of the equated revenue, and by equated I mean I have taken the revenue for the first eight months of the year and applied the 25 per cent increase both to the log traffic and to the carload traffic and the per cent that the log traffic bears to the total, arrived at in this manner, is 17.7 per cent. And with reference to the average haul the logs show an average haul for the year of 31.4 miles as compared with 99.7 miles for all other

[fol. 1400] carload traffic, or a total intrastate carload of 66 miles including logs in all cases.

Mr. Henderson: Have you this exhibit prepared, we will stipulate that your witness will testify to it.

Mr. Dudley: I want my witness to testify.

Mr. Henderson: Then I must go. I am perfectly willing to stipulate that that exhibit is correct.

Mr. Balmer: I have just asked Mr. Turnburke when I could put in a form of an exhibit, the substance of correction of Mr. Gray's method and he has said he could get it out very soon and sent it in and I would like to ask the commission to permit it.

Mr. Henderson: That is satisfactory.

E. C. Gibbs (recalled).

Mr. Dudley: Have you checked over the Associated Log Shipper's Revised exhibit #4?

A. Yes sir.

Q. Now I call your attention to the cost of operation of the log traffic as shown in line 11. I am speaking now with reference to the column used for the Milwaukee figures only.

Mr. Henderson: Isn't that shown in exhibit line 11 just exactly what the correction is?

Mr. Dudley: Yes, but there is something more.

A. I didn't get the question.

[fol. 1401] Mr. Dudley: Calling your attention to line 11, the item, $714,474.00, I will ask you whether or not that item is correct, and if you answer no, state briefly where the error is?

A. It is incorrect because it does not include a proportion of the cost of non-revenue freight, its just proportion.

Q. You have worked out this correction by two different methods?

A. Yes sir, I have.

Q. And embodied them in exhibit form?

A. Yes sir.

Mr. Dudley: We desire to offer this exhibit in evidence as Milwaukee's Exhibit No. 29.

Mr. Henderson: No objection.

The Director: It will be admitted.

(Admitted and so marked.)

Mr. Dudley: The effect of that correction is to reduce this item of $714,474.00 how much?

A. Well, I don't get that: it increases it to $832,368.00 approximately $114,000.00 and some odd dollars.

Q. And that changes the item in line 13 where it shows $317,883.00 how much?

A. $199,989.00.

Mr. Henderson: That is all here in the exhibit in those words.

Mr. Dudley: Let me examine my own witness in my own way, please. Now you were present and heard Mr. Gray testify that the weight of the Milwaukee flat car equipment was heavier than the [fol. 1402] other car, which was approximately 16 ton.

A. Yes sir.

Q. In this exhibit Mr. Gray should have treated the Milwaukee flat car weight 14 ton, the same as the other cars?

A. Yes sir.

Q. Making a correction of two tons, how much further would that decrease his net operating gain from logging operations?

A. It would make his net gain from logging operations $50,645.

Q. Now in this exhibit Mr. Gibbs I notice you say line 1 to 7 is correct. Line 8 is correct. Line 9 is correct. Line 12 is correct, and line 15 is correct. What do you mean by the words "is correct"? That it is mathematically correct on the basis on which Mr. Gray was proceeding?

A. That is it.

Q. That the exhibit itself is correct or the assumption?

A. No sir.

Q. Merely that it is mathematically correct on his basis?

A. Yes, following his method.

Mr. Henderson: That is all.

Mr. Dudley: That is all.

H. O. Berger, a witness produced on behalf of the Department, after being first duly sworn, testified as follows:

[fol. 1403] Direct examination.

Mr. Dolphin:

Q. You are assistant rate expert of the department of Public Works?

A. Yes sir.

Q. In your capacity as rate expert have you made a study of the logging situation and the rates pertaining thereto in this case?

A. Yes, as pertaining to this case.

Q. Have you prepared an exhibit or two exhibits to be presented at this time?

A. I have.

Mr. Dolphin: I will ask that these exhibits be admitted.

The Director: They will be admitted and marked "Department's exhibits C and D."

(Exhibits so marked and admitted.)

Q. Will you explain in a general way what these exhibits represent?

A. Exhibit #C is the present log distance scale of the Northern Pacific and the present average log rates of all of the roads compared with the various proposed scales, and in the first column shows the distances and in the second column the Northern Pacific present distance scales and in the third column is the present average log rate and then the fourth column is the average log rates less 21½ per cent. The fifth is a plotted curve of these rates in column four and the sixth column is a proposed rate. The two columns following, that is, 7 and 8 show the revenue per ton mile and the minimum revenue per car mile based on 7,000 feet, and that is compared with [fol. 1404] the rates which were proposed in Mr. Gray's exhibit at the prior hearing, shown in column C of his exhibits 5 or 6, I am not sure which it was. Now the other two, proposed rates, were rates which were worked out of course in the office. By turning to the next page, this represents or is an application of the proposed rates to the actual traffic movement of logs reported by the carriers to the Department covering the period of a year, the year 1920, which is shown. The movement for each distance is shown, the number of cars which moved on the present rate, and the amount. Really it is not the amount of the freight charges, it is merely a computation secured by multiplying the rate by the number of cars, and that is compared with the proposed rate by Mr. Freeman, and the amount is shown there and a comparison shown of the p-otted tariff of the average log rates in comparison with the proposed rate which is shown in column 6 on the first page of exhibit C. On page 3, or the last page is shown the total. In order to secure the amount of revenue I multiplied by 7, or 7,000 feet and it is shown that under the present rate the revenue would be based upon such a computation; that is, the revenue would be $2,557,889.07½, while under the proposed rates of Mr. Freeman the revenue would have been $3,051,575.82, and under the plotted curve of the average log rates the amount would have been $2,045,241.66. The proposed rate would bring a revenue under such a competition of $2,085,851.25. The revenue per car mile under each scale of rates is shown as well as the revenue per ton mile. And the method upon which this is computed is also shown [fol. 1405] on the same page as a foot note. Turning to exhibit D——

Mr. Da Ponte: Hadn't we better examine him about this exhibit D?

A. Well, probably it would be better to go — exhibit D and explain that first.

Mr. Dolphin: One exhibit really explains the other. That is the reason we introduced the two together.

Supervisor Cleland: Go ahead.

A. Exhibit D is an analysis of the proposed trainload rate of Mr. Gray applied to actual movement that the principal carriers reported for the year 1920. Now this is practically the same, and I might say that the proposed trainload rate of Mr. Gray was merely a computation showing what his trainload rates would be if you straight-

ened out the curve reducing the rate 25 per cent. Now that was secured by taking the actual trainload movement, or rather the movement which moved on the trainload rate during the period reported by the carriers and applying the present trainload rate, and then applying the proposed trainload rate, securing the revenue or a computation of what would be the revenue and then taking the cars which moved under single car rates and applying that revenue. It was made up for the purpose of showing the differential existing between, or which would be required between the single car rate and the train load rate if both were put into effect. That is continued on page 2 and 3, page 3 shows that of the total movement 58.79% moved under trainload rate and 41.21 per cent moved under single car rates. Now the single car rates were designed to accomplish the same amount of reduction in revenue as the trainload rates. It is [fol. 1406] merely for the purpose of showing the differential between the trainload and single car rates, and as is shown the trainload rates proposed by Mr. Gray would have produced a reduction of 23.48 per cent and the *the* single rates, and whereby such a trainload rate would have produced a reduction of 20.85 per cent, or about a comparable reduction. As is stated in the foot note the statement is for the purpose of showing the effect that trainload rates have on the construction of single car rates, and the differential between the trainload rates and the single car rates increases according to the distance, which I believe to be contrary to the princip*als* of rate making. It is possible that single car rates could be made which would bear fixed differentials between the trainload rates and the single car rates, but this would require that the single car rates start at probably $1.50 or more, and to my notion the differential of 50 cents as between trainload and single car rates would be too extreme. Now on the last page there the comparison of the proposed rates with Mr. Gray's proposed trainload rates and the required single car rates, and I think it quite clearly shows that the difference between the trainload rate and the required single car rate and the increase in differentials. Now if one single car rate is put into effect there would be a difference as between the trainload rate and the single car rates which might be put into effect, but to my mind the single car rates will be more nearly comparable with the trainload rates than the single car which accompanies the trainload rates. I think that explains the two exhibits.

[fol. 1407] Mr. Dolphin: Is there any further statement that you would like to make in reference to these exhibits?

A. Well, I might say how I arrived at these rates. My first object was to secure a rate which I thought would be reasonable for a distance of five miles.

Mr. Da Ponte: Which column is that?

A. It is the one marked "H. O. B. Proposed Rate," column five. The log traffic is generally a traffic which moves in lots of more than one car, and as is shown by exhibit D is at least 58.79 per cent of the traffic, which moves in trainloads of ten cars or more. I therefore, thought that the movement could be compared to a switching movement of a distance of five miles, and since the switching rates

can be found without any trouble, amounting to approximately $7.50 to $8.50 per car. It appears to me that a revenue received upon such a line movement would be reasonable. Now applying the $1.10 rate to the average loading of 7,500 feet per car on logs would produce a revenue of $8.25. The log traffic, as stated, is generally in train lots and is similar to the movement of switch engines, when hauled five miles by a switch engine it picks up a varied number of cars and delivers them to various industries within the terminal. As to the increasing ratio for distances above five miles it would appear to me that a ten cent difference in the rate for each break of five miles would be reasonable, and that is, generally, how this proposed rate was obtained. The $1.10 rate accomplished about a 20 per cent reduction from the present average log rate and taking the general 20 per cent of the average log rate would produce rates which are comparable to those that are shown in the proposed rate.

[fol. 1408] Mr. Dolphin: On exhibit C you have plotted curves there for log rates less than 21½ per cent. What does that 21½ per cent indicate?

A. Well, that was merely a computation, and as I say, taking this 21½ per cent of the average log rates would produce a revenue or rates which were a trifle lower than the rates in effect prior to August 26th, and the plotted curve is merely the straightening out of the rates. If you will notice in the average log rates for the distance of five miles the average log rate at the present time is $1.38. Then as you go along you will find that for 35 miles the average log rate is $2.22½, while for 40 miles it is $2.12, and for 45 miles $2.14. That is the rate for greater distances in many instances were lower than the rates for shorter distances, and the plotted curve is merely the straightening out of those rates in order to produce a Light revenue.

Mr. Hayden: Your statement about the percentage of cars which moved under single car rate and on the trainload rate—now is that 58 per cent?

A. That was 58.79 per cent.

Q. That is the movement under the present car rate?

A. Under the present trainload rate.

Q. Some of those trainload rates have a basis of 18 and some 15 and some 20 cars?

A. Yes.

Q. That is, that percentage is not the governing criterion, what the percentage would be on a ten car trainload rate?

A. Well, insofar as the present trainload rates are concerned I think it would. However, it seems apparent to me that under the single car rates that are shown here and the number of cars moving [fol. 1409] in single lots under single car rates that very probably there was a movement under those single car rates where there were trainloads or movement of ten cars or more at one particular time, so that probably that rate is materially higher.

Mr. Hayden: That is, that does not purport to show what the movement of ten cars actually was?

A. No. It manifestly couldn't show that from the loggers, that we had from the carriers.

Supervisor Cleland: Your purpose was to reduce the present log rates to the rates in effect prior to the order in Ex-Parte 74, or thereabouts?

A. Yes, that is what the proposed rates would practically do.

Supervisor Cleland: That is, to eliminate the inequality?

A. To eliminate the inequality.

Q. Resulting in the reduction of what per cent?

A. 18.45 per cent. Now of course, that is merely a computation, but I think would be very comparable with or very nearly correct because it is based upon 7,000 pounds as a figure, while of course there might have been an average of 8,000 pounds or 7,500 pounds on the car. If the rates applied at different times were applied to these different movements it would still hold that ratio of 18.45 per cent.

Mr. Hayden: That is, that is the reduction of 18.45 per cent from the average log rates made up of the distance fares and the commodity fares in trainloads and single cars and the average of all?

A. Yes, the average of all.

[fol. 1410] Supervisor Cleland: How do you arrive at your first step, the first rate?

A. The manner in which I arrived at that was that I took as a basis what I considered a comparable movement—that is, a switching movement.

Supervisor Cleland: I understood that, but did you take into consideration the cost of that movement?

A. Well, in that the switching rates are now in effect have not been declared unreasonable I considered that that would be a basis, and also that the movement of this sort would not be entirely within the terminal while a switch movement is within a terminal.

Supervisor Cleland: Then you obtained your first rate by taking the switching tariff movement, a similar movement, and adopting that switching rate as the first step in your scale?

A. Practically so, yes.

Mr. Balmer: When did you prepare these exhibits?

A. They were prepared in the last two or three weeks.

Q. You commenced their preparation two or three weeks ago?

A. Yes sir.

Q. When were they completed?

A. They were completed probably a week ago Thursday.

Q. The Thursday before the Monday on which this hearing commenced?

A. Yes sir.

Q. Now your present position with the commission, was that of Assistant Rate Expert, Is that your title?

[fol. 1411] A. Well, yes, that is true.

Q. How long have you been with the commission?

A. Since April.

Q. What was your rate experience prior to that time?

A. Prior to that time I was with the Tacoma Chamber of Com-

merce in the traffic bureau and before that time I was with the Trans-Continental freight bureau in Seattle, which was, and is now a member of the carriers and——

Q. How long a time did you spend in the Trans-Continental Freight Bureau, and what were your duties there?

A. I worked for the Trans-Continental Freight Bureau just about 1910 and for about two years I was mainly in the operating department; that is employed by the Trans-Continental freight Bureau in the operating department of the Great Northern, and then became inspector of freight, classifying freight.

Q. You examined freight to see what its classification would be for the purpose of assessing the rate?

A. Yes that is true. I don't exactly remember the date, but I think sometime around in 1915 I was auditor for them and about 1917 chief clerk for the Seattle office.

Q. You were never in a position where you had anything to do with the actual making of rates?

A. No.

Mr. Balmer: That is all.

Mr. Da Ponte: Mr. Berger, switching rates are made at so much per car for the delivery of freight after it reaches the terminal?

A. Not always, there may be an intra-terminal movement.

Q. Of so much per car?

[fol. 1412] Q. And the switching rate does not classify commodities or anything of that kind? Simply so much per car regardless of what is in it.

A. Yes, it is true, at least in this territory.

Q. And did you ever in your life hear of such a thing as predicating a line haul rate on a commodity on any such basis as that?

A. I think it is comparable.

Q. Did you ever hear of anybody doing it before?

A. I cannot right now cite any examples.

Q. In making up this so called schedule, the cost to the company or the carrier, you have no information as to that?

A. No I have not.

Q. In fact you had no information as to that?

A. No I did not.

Q. In fact, you had no information whatever, nor have you heard any of the testimony in the case when you made up this?

A. I didn't hear all of it. I was here and heard some of the testimony.

Q. That was the testimony taken in the case at a previous hearing, up to that time?

A. Yes. As I say, I didn't hear all of it. In fact, very little of it.

Q. Now you say you show the present average log rate in your second column, now that means the rate upon which logs actually moved, doesn't it?

A. No, that wouldn't be the rate on which the logs actually moved.

[fol. 1413] Q. Well that is the rate which is actually paid for the actual movement?

A. It is taking the number of cars for each distance; that is, each multiple of five miles. By adding the total number of cars to the total freight charges and then securing the average freight.

Q. In other words, that represents in column two the amount of money the carriers received?

A. Per thousand feet on an average of five miles or ten miles.

Q. For the haul shown. Now in your column three average log rates less 21 per cent, that was the percentage that you figured was needed to wipe out the advances under Ex Parte 74 made by the department in this state?

A. Approximately so, yes.

Q. And then your plotted curve log rate you have explained, how did you get that? And in column 5 "H. O. B." that means you, Mr. Berger? Anyhow this is minimum revenue ton miles—do you mean that is the revenue per ton miles received on the average rate?

A. That would be the ton mile revenue for all the logs, a distance of five miles. It would be larger than that for three miles, for example——

Q. That is a revenue however, which the carriers received under the average rate shown in column 2 as applied to ton miles?

A. No, that is the average amount the carrier would receive under my proposed rate.

[fol. 1414] Q. Now what is column 7? Minimum revenue, car mile 7,000 feet, that is the revenue per car mile or 7,000 feet under your proposed scale?

A. Yes, sir.

Q. Now Gray's curve (D), what does that mean?

A. That was taken from his exhibit that was introduced at the last hearing, I think it was in June.

Q. Is that the rate that they suggested?

A. That is the one that he covers. I might get that exhibit for you if you wish to read exactly what he says in there.

Q. I wish you would explain how you get that rate based on Mr. Gray's exhibit?

A. Do you mean that shown as "Gray's graph D?"

Q. Yes.

A. That is an exact copy I think from the exhibit which he has shown, and column D is one of his sheets in his exhibit introduced in June last.

Q. And you don't know how Mr. Gray arrived at that rate? Or what he took into consideration, do you?

A. No I do not, outside of what he says in his exhibit.

Q. Now "O. O. C." that is the 9th column, what does that mean? That is as proposed?

A. Yes, sir.

Q. What does that mean?

A. Well, I might say that that was simply marked down as a computation that would be produced by a 21 per cent decrease of the rates which were proposed by Mr. Freeman.

[fol. 1415] Q. Well, that would be a decrease wouldn't it? 21 per cent on Freeman's?

A. Yes.
Q. That is reducing Freeman's rate 21 per cent?
A. Yes.
Q. And you have no information as to what that figure was based on, except that it was 21 per cent less than Freeman's?
A. Yes.
Q. Now Mr. Freeman was also employed by the Department of Public Works?
A. Yes sir.
Q. And he proposed the rate shown in the last column, or No. 10?
A. Yes sir.
Q. Now Mr. Freeman was also employed by the Department of Public Works?
A. Yes sir.
Q. And he proposed the rate shown in the last column, or No. 10?
A. Yes sir.
Q. And that is very much higher than your rate, isn't it?
A. Yes sir.
Q. But you don't know what he figured that on, do you?
A. No, I don't know generally. Of course, I was in the office at the time he was figuring on this but I didn't assist him at all.
Q. You didn't hear the evidence or the argument in the case. Had he heard any more of the argument in the case than you [fol. 1416] did?
A. Yes.
Q. He had heard the same men that you had?
A. No, more.
Q. Where had he heard any more than you?
A. He was in attendance all the time during the other hearings, I believe.
Q. How many hearings did we have heretofore?
A. I think there was a date in April, and probably more.
Q. However, the record shows what that was.

The Director: It was four or five days altogether.
Mr. Da Ponte: I think there was two or three or four, anyway the record shows what that was.

Mr. Da Ponte: Now the second thing, application of proposed rates to actual traffic movement of logs. You are attempting to show there the amount of money that the railroad would receive under several rates for the traffic which actually moved in 1920.
A. Not in each one of these figures. That is, I think I explained that before. That is, by taking the number of cars and multiplying it by $1.25 would produce that amount.
Q. Where did you get the number of cars?
A. That is taken from the data which was submitted by the carriers.
Q. Point to point exhibit for 1920?
A. Yes, sir, or for the period which is shown at the top of the page, and in each case you would have to multiply the amount which is shown by 7 or the actual number of feet which were on the

[fol. 1417] car, and for the purpose of easy compensation and for the reason we had no figures as to what the actual number of feet on the car were I multiplied by 7 as being the general minimum which was in effect in that territory.

Q. Now turn to the last page, the column headed "Amount," that means amount of freight 365,412——

A. I didn't say that, that is not the amount of freight.

Q. What is that?

A. That is, as I say, that is a computation secured by multiplying the rate times the number of cars which produces amount which when multiplied by 7 or 7,000 feet would produce the revenue.

Q. That is the number of thousand feet?

A. No you are wrong there. That is, you mean seven is the number of thousand feet.

Q. No. That 365,412,725.

A. Not at all.

Q. Well, at any rate the multiplication of 7,000 feet gives you the amount of revenue the carriers received as $2,557,889.00?

A. Yes, you can assume that.

Q. That is the actual revenue received under the rates as they were in 1920?

A. As I say, you can assume that, that is not material.

Q. I mean approximately.

A. Yes.

Mr. Hayden: That assumes that each car had 7,000 feet?

[fol. 1418] A. That is the assumption I have to make.

Mr. Da Ponte: Then under Freeman's scale the amount of revenue would be $3,051,575.80 or a 19.3 per cent increase?

A. Yes sir.

Q. Now then the proposed rate in the last two columns is the rate that you proposed?

A. The one finishing out with $3.40 for a distance of 140 miles.

Q. That is in the last column but one?

A. Yes sir.

Q. That is Berger's column then. So that if your proposition goes through you will—you are going to reduce the aggregate of that revenue of all of the companies involved there from $2,557,859 to about 2,085,851 or 18.45 per cent, which you proposed as a reasonable reduction, is that the idea?

A. I think probably I had better state that. You reduce the first column, or rather, you will reduce the amount shown in the first column headed "amount" to that shown in the last column, which accomplishes a reduction of 18.45 per cent.

Q. And that is your idea is it of a reasonable rate on logs?

A. I think I have testified in regard to that, yes.

Q. And you gave no consideration whatever to whether the rate would be remunerated or pay the cost of the traffic, to say nothing of any return on the property, now did you?

A. I think we will become involved in an argument if you con-

[fol. 1419] tinue that. Yes.

Mr. Da Ponte: That is all. Now let's see exhibit D, I expected you would explain that some but I want to understand that a little better. Analysis of Mr. Gray's proposed trainload rates applied to actual movement of all principal carriers—now this then is Mr. Gray's proposed trainload rate which is indicated at the bottom. That is understood?

A. No I don't think so.

Q. How did you get that?

A. That is merely a rate which he intended to show would accomplish a 25 per cent reduction.

Q. Oh, he set out then with the purpose of accomplishing a 25 per cent reduction, and those were the figures which were needed for that purpose?

A. Well, I think I can say this about that——

Q. I was just trying to get at what the facts were. In other words, take your rate for 25 and 30 miles as Northern Pacific average haul in that vicinity, the present trainload rate is $1.56½, at the top of the page #2, exhibit D, is that right?

A. I am not sure whether that is the Northern Pacific.

Q. Where did you get that trainload rate? Whose rate is that, is that the average, or is that some particular company?

A. No, that is the actual rate applied in that particular movement; whether it is the Northern Pacific I can't tell you.

Q. That is the average of the four companies?

A. No, it is the actual rate which applied to a particular move-
[fol. 1420] ment.

Q. Well, at any rate, whose ever rate it is, there appears to be a present trainload rate 26 to 30 miles of $1.56½?

A. Yes sir.

Q. And in order to make the 25 per cent reduction so as to wipe out Ex Parte 74, presumably Mr. Gray finds a reduction of 25 to 30 per cent?

Mr. Hayden: You can see on the face of it it would not be that.

A. My view is that that is a 25 per cent reduction in revenue and not a 25 per cent reduction in all of the rates generally published.

Mr. Da Ponte:

Q. At any rate your present trainload rate 26 to 30 miles is given $31,598.91?

A. Yes.

Q. Now he reduced that 25 per cent to $26,652.12?

A. You have that idea wrong.

Q. Let's get it right.

A. $1.32 is the rate which is really a curve rating and is supposed to have accomplished a 25 per cent reduction in the total freight charges within the period of a year.

Q. For that distance?

A. No not for that distance because it mightn't apply that way, because if you have the rate for 30 miles that was also the rate for 20 miles, you would have to adjust that someway in order to bring

your steps up to a comparable basis. According to distances therefore the 30 miles rate being lower than the 20 mile rate there would be more of an increase on that than there would be on a 20 mile. [fol. 1421] Q. But at any rate the purpose of this schedule was to prescribe rates which would accomplish a reduction in revenue of about 25 per cent?

A. That was just introduced for that purpose, yes, and the reason this exhibit D was introduced was merely to show a comparison of trainload and single car rates.

Q. Now what percentage of the movement has been paying the single car rate?

A. 41.21 per cent, that is in the column headed "cars single lots," yes.

Q. And those number 80444?

A. Yes.

Q. And the cars in trainload lots number how many?

A. 114,777.

Q. And so it appears that of the average on all the four companies' lines, 41 per cent has heretofore been moving under single car rates, or at least paying the rates applicable to single car rates?

A. Yes.

Q. And 59 per cent under the trainload rates of ten cars or more?

A. Yes sir.

Q. Now page four of that exhibit is Mr. Gray's?

A. I think that is the real comparison insofar as the exhibit wanted to show any comparison.

Q. Now take the distance of 26 to 30 miles in your first column, the present trainload rate of $1.56½, Mr. Gray proposed to make it $1.32?

A. No, I cannot say that he proposed to do that.

Q. Well, that was what he needed to accomplish what he set out to prove.

[fol. 1422] A. You mean in what connection that he set out to prove?

Q. Well the cost reduction that he set out to accomplish as he stated awhile ago.

A. To accomplish the 25 per cent reduction, yes.

Q. So that instead of $1.56½ you have $1.32 under this schedule?

A. Yes.

Q. And your single car rate for that distance appears to be $2.27?

A. No, that is the present scale, present single car rate.

Q. And he proposes to make that $1.65?

A. That would be what would be required to accomplish an equal reduction in revenue.

Q. Because the single car rates are somewhat higher than the trainload rates?

A. Well, it would require that. If you had the same revenue, or if you had the same rates for single cars that you had for trainloads, then either the trainload rates would have to be higher than what they are, or the single car rate would have to be higher than the trainload rate.

Q. What do you mean by that?

A. What I am trying to show here is—taking a trainload basis of a trainload rate which is evenly graded up according to distances, I am trying to show what a single car rate would have to be and taking that trainload rate merely as a basis. I could have taken [fol. 1423] but there were no other suggested rates, then I produced what might be called the required single car rate to act as a combination trainload rate.

Mr. Da Ponte: I believe that is all.

Mr. Dudley: This is what you call a Democratic tariff, wouldn't you, it is revised downward?

A. That is the effect of it, yes.

Q. It was prepared in accordance with your own ideas?

A. I don't know that that would be absolutely true.

Q. And if found non-compensatory, of course, under all the evidence you would not contend that it was a reasonable tariff?

A. If found non-compensatory——

Mr. Hayden: I would think that would be a matter for the commission to determine.

A. Yes.

Mr. Dudley: Did I understand you that you would not consider it reasonable whether compensatory or not?

A. I wouldn't consider it reasonable.

Mr. Dudley: No tariff is reasonable unless compensatory.

A. That is a question of law.

Q. I am asking you, as a rate expert.

Supervisor Cleland: I think Mr. Berger is not contending that these are rates which should be established, but is merely offering this as an effort in straightening out the matter.

Mr. Dudley: I am through if your honor please. Of course, be- [fol. 1424] ing a democratic tariff I have nothing to do with it.

Supervisor Cleland: But the democratic tariffs during the past three or four years have not always been the rule.

Mr. Dolphin: I would like to offer this in evidence.

The Director: It will be admitted, General Order No. 28 was a Democratic tariff.

The Director: The hearing is adjourned.

Supervisor Cleland: Do you want to file brief?

Mr. Da Ponte: What is the commission's desire?

Supervisor Cleland: As far as I am personally concerned, I don't need any.

The Director: The carriers have 20 days to file briefs and the loggers 15 days after service upon them of the carriers' briefs to file answering briefs. The hearing is adjourned.

[fol. 1425] [Title omitted]

STATEMENT OF POINTS TO BE RELIED UPON AND DESIGNATION OF PARTS OF RECORD TO BE PRINTED—Filed May 15, 1924

To the Honorable William R. Stansbury, Clerk of the Supreme Court of the United States, Washington, D. C.:

The plaintiffs in error, Northern Pacific Railway Company, Great Northern Railway Company, Chicago, Milwaukee & St. Paul Railway Company, Oregon-Washington Railroad & Navigation Company, North Pacific Coast Freight Bureau, and S. J. Henry, as Agent thereof, hereby submit the points upon which they will rely on the hearing of the writ of error, and the portions of the record to be printed pursuant to rule 10, clause 9 of the rules of this Court:

(1) That the Supreme Court of the State of Washington erred in deciding that the burden of proof was on plaintiffs in error to show that the rates and charges applicable to the transportation of logs were not unjust, unreasonable and discriminatory, and erred in refusing to set aside the order of the Department of Public Works on that ground, which point is more particularly specified in assignments of error I and II.

(2) The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works which cancelled the schedule of rates applicable to the transportation of logs [fol. 1426] prescribed pursuant to the order of the Interstate Commerce Commission in Ex Parte 74; 58 I. C. C. p. 220, thereby discriminating against interstate commerce, contrary to the commerce clause of the Constitution of the United States and the Acts of Congress regulating interstate commerce, and depriving plaintiffs in error of a fair return on the value of their property, as more particularly specified in assignment of error No. III.

(3) The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works reducing log rates in this state, because said Department incorrectly and inadequately determined the cost of said log transportation by using a fundamentally erroneous theory and thereby deprived plaintiffs in error and each of them of just compensation for the transportation service rendered, as specified more particularly in assignment of error IV.

(4) The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works prescribing a schedule of rates for the transportation of logs, because the Department incorrectly and inadequately determined the value of the property of plaintiffs in error, and each of them, devoted to said transportation by adopting a fundamentally erroneous theory for the determination of such valuation, as specified more in detail in assignment of error No. V.

(5) The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works on the ground that the ad valorem taxes paid by the plaintiffs in error are inadequately apportioned to the log traffic and no federal income taxes whatever are allowed, as specified in assignment of error No. VI.

(6) The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works, prescribing said schedule of log rates, because the Department attempted to determine the average cost of log transportation on the four systems [fol. 1427] and the aggregate value of the property of the four systems and did not attempt to determine the cost of transporting logs on each or any of the systems, nor the value of the property of each or any of the plaintiffs in error devoted to log transportation, as specified more in detail in assignments of error Nos. VII and VIII.

(7) The Supreme Court of the State of Washington erred in affirming said order of the Department of Public Works, because the same prescribed a confiscatory schedule of log rates, as stated in assignment of error No. IX.

(8) The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works, for the reason that said order is not supported by the findings made, and for the further reason that the said findings are not supported by any evidence and are contrary to the undisputed evidence, as stated in asignment of error No. X.

(9) The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works which cancelled Tariff No. 29, filed by plaintiffs in error, for the reason that the rates there named are no higher than plaintiffs in error and each of them are entitled to for the transportation of logs, as shown by the undisputed evidence and as stated in assignment of error No. XI.

(10) The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works, because the said order was for an experimental purpose only and for the purpose of determining whether the schedule of rates prescribed would be sufficient after a trial thereof had been made, as stated in assignment of error No. XII.

(11) The Oregon-Washington Railroad & Navigation Company submits that the Supreme Court of the State of Washington erred in affirming said order of the Department of Public Works, because nothing was allowed by the said order and by the Supreme Court for the amortization of the investment of that company in what is known as its North River Branch Line, as stated in assignment of error No. XIII.

[fol. 1428] (12) The Supreme Court of the State of Washington erred in affirming said order of the Department of Public Works, for the reason that the same prescribes an unjust, unreasonable and

confiscatory schedule of log rates, which does not pay the cost of the traffic to which the same applies, nor allow any return for the fair value of the property used in said transportation, and thereby the property of the plaintiffs in error and each of them is taken without due process of law, in violation of the fourteenth amendment to the constitution of the United States.

(13) The Supreme Court of Washington erred in affirming said order of the Department of Public Works, for the reason that the same prescribes an unreasonably low and confiscatory schedule of log rates and thereby unlawfully burdens interstate commerce and unlawfully prefers intrastate commerce in said state, in violatioon of the commerce clause of the constitution of the United States and acts of Congress regulating interstate commerce.

Northern Pacific Railway Company, by L. B. da Ponte, Its Attorneys. Great Northern Railway Company, by F. G. Dorety, John H. Carroll, Thomas Balmer, Its Attorneys. Chicago, Milwaukee & St. Paul Railway Company, by W. Dudley, Its Attorneys. Oregon-Washington Railroad & Navigation Company, by W. A. Robbins, Its Attorneys. North Pacific Coast Freight Bureau and S. J. Henry, as Agents Thereof, by Thomas Balmer, L. B. da Ponte, Their Attorneys.

[fol. 1429] Statement of the Parts of the Record to be Printed

Plaintiffs in error request that the following portions of the record be printed, which contain all of the material evidence needed for the determination and decision of the foregoing points on which plaintiffs in error rely for a reversal of the judgment below on this writ of error:

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1. Complaint before the Public Service Commission in Cause No. 5159	1	1
2. Findings of Fact and Order in Cause No. 5092	1	4
3. Answer of Great Northern Ry. Co. in Cause No. 5159	1	11
4. Answer of O.,W. R. & N. Co. in Cause No. 5159	1	14
5. Answer of C., M. & St. P. Ry. Co. in Cause No. 5159	1	16
6. North Pacific Coast Freight Bureau Tariff 29	1	17
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14.	Order of Supreme Court denying Rehearing....	1	162
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19.	Supersedeas Bonds—C., M. & St. P., G. N., N. P. and O., W. R. & N. and N. P. C. Freight Bureau	1	178–187
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[fol. 1430] Evidence and Exhibits of Department of Public Works.

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1.	O. O. Calderhead (Tr. of Test.).....	3–7	9
	Department's Exhibit "A"	2	193

Evidence and Exhibits of Northern Pacific Railway Company

1.	L. R. Capron	3–7	284-346
	(All of the testimony of L. R. Capron in the record)	"	1368-1377
	Exhibits identified by Capron as follows:		
	N. P. Exhibits 1, 2, 3, 4, 5, 6, 7, 8, 9....	2	197-207
2.	E. V. Peterson	3–7	346-407
	(Being all of the testimony of E. V. Peterson in the record.) (This witness' name is at one place erroneously stated in the record as "J." Peterson.)	"	491-503
		"	676-753
	Exhibits identified by Peterson as follows:		
	N. P. Exhibits 15, 16, 17, 18, 19, 20, and 21, and	2	208-210
	Exs. 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, and 48	2	212-215 227-242
3.	W. C. Albee	3–7	408-491
	(Being all of the testimony of W. C. Albee in the record.)		
	N. P. Exhibits identified by Albee as follows:		
	25, 26, 27, 28, 29, 30 and 31.....	2	216-222
4.	G. H. Plummer	3–7	649-662
	(Being all of the testimony of G. H. Plummer in the record.)		
5.	P. L. Allen	3–7	662-667
	(Being all of the testimony of P. L. Allen in the record.)		
	N. P. Exhibit 34 identified by Allen.....	2	224
6.	Harry Bryan	3–7	667-676
	(Being all of the testimony of Harry Bryan in the record.)		

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Part of N. P. Exhibit 35, being pages 1, 2, 3 and 4 of said exhibit only. (This is the recapitulation and three sheets following)	2	225
7. O. O. Calderhead	3–7	753-767
N. P. Exhibit 50, identified by O. O. Calderhead	2	244
8. Northern Pacific Annual Report to Public Service Commission: Pages 200, 299, 300, 301, 302, 506, 507, 506a and 507a of Annual Report for 1920. (This was not given exhibit number, but the entire reports were made part of the record.)		

[fol. 1431] Evidence and Exhibits of Great Northern Railway Company

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C. McDonough	"	512-519
	"	779-790
	"	1377-1378
C. N. Bolander	"	790-795
V. P. Turnburke	"	799-875
	"	1385-1400
L. W. Woodrow	"	1378-1385
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No. 23	"	396
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No. 25 (Pages 24-32; 33-37; 38-47; 47-55 and page 72)	"	402

The following portions of the 1920 Annual Report of the Great Northern to the Public Service Commission of Washington, viz: pages 506-507, Schedule 531A, "Statistics of Rail Line Operations" (System); pages 506a-507a Schedule 531B "Rail Line Operations within the State"; also pages 200, 299, 300, 301 and 302.

[fol. 1432] Exidence and Exhibits of Chicago, Milwaukee & St. Paul Railway Company

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C., M. & St. P. Exhibits 17, 18, 19, 20 and 21	2	310-316

The following portions of the 1920 Annual Report of the C., M. & St. P. to the Public Service Commission of Washington, viz: pages 506-507, Schedule 531A, "Statistics of Rail Line Operations" (System); pages 506a-507a Schedule 531B "Rail Line Operations within the State;" also pages 200, 299, 300, 301 and 302.

[fol. 1433] Evidence and Exhibits of Oregon-Washington Railroad & Navigation Company

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The following portions of the 1920 Annual Report of the O. W. R. & N. Co. to the Public Service Commission of Washington, viz: pages 506-507, Schedule 531A, "Statistics of Rail Line Operations" (System); pages 506a-507a, Schedule 531B "Rail Line Operations within the State"; also pages 200, 299, 300, 301 and 302.

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[fol. 1434] Service of the foregoing statement of points and designation of parts of the record to be printed, and the receipt of a true copy thereof, is hereby acknowledged by the Defendants in Error at Olympia, Washington, on this 8th day of May, 1924.

John H. Dunbar, Attorney General. Raymond W. Clifford, Scott Z. Henderson, Stephen V. Carey, Attorneys for Defendants in Error.

[File endorsement omitted.]

Endorsed on cover: File No. 30,298. Washington Supreme Court. Term No. 371. Northern Pacific Railway Company, Great Northern Railway Company, Chicago, Milwaukee & St. Paul Railway Company, et al., plaintiffs in error, vs. The Department of Public Works of Washington, E. V. Kuykendall, Director of Public Works; Hance H. Cleland, Supervisor of Public Utilities, et al. Filed April 29, 1924. File No. 30,298.

(30,298)

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1924

No. 371

NORTHERN PACIFIC RAILWAY COMPANY, GREAT NORTHERN RAILWAY COMPANY, CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY, PLAINTIFFS IN ERROR,

vs.

THE DEPARTMENT OF PUBLIC WORKS OF WASHINGTON, E. V. KUYKENDALL, DIRECTOR OF PUBLIC WORKS; HANCE H. CLELAND, SUPERVISOR OF PUBLIC UTILITIES, ET AL.

IN ERROR TO THE SUPREME COURT OF THE STATE OF WASHINGTON

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C., M. & St. P. Ry. Co. Exhibit No. 6—Statement showing actual cost of repairing log flats at various points	295	1
C., M. & St. P. Ry. Co. Exhibit No. 30—Extracts from annual report to I. C. C	326	1
Sheet 201—Comparative general balance sheet, liability side	326	1
Sheets 304 to 309 and 304*a* to 309*a*, Inclusive—Railway operating expenses	344	1
Sheets 508 and 509—Revenue freight carried during year	368	2
G. N. Ry. Co. Exhibit No. 3—Freight proportion of operating expenses, lines in Washington	371	2
G. N. Ry. Co. Exhibit No. 5—Statement showing gross and net ton mile of revenue freight handled in Washington, September, October, and November, 1920	373	2
G. N. Ry. Co. Exhibit No. 16—Statement of cost of handling logs in Spokane and other divisions in Washington, September and November, 1920	387	2
G. N. Ry. Co. Exhibit No. 18—Statement showing proportion of valuation and taxes in Washington applying to log traffic, September to November, 1920	389	2
G. N. Ry. Co. Exhibit No. 19—Net loss from handling logs in Washington, September-November, 1920	390	2
Extract from G. N. Ry. Co. Exhibit No. 25, Schedule C, Table IV—Recapitulation of steam railroad valuation by counties	402	2
G. N. Ry. Co. Exhibit No. 27—Report of G. N. R. R. Co. to I. C. C	406	2
Sheet 303*a*—Railway operating revenues	427	2
Sheets 303 to 309 and 304*a* to 309*a*, Inclusive—Railway operating expenses	428	2
Sheets 508, 509, 508*a* and 509*a*—Revenue freight carried during year	455	2
O.-W. R. & N. Co. Exhibit No. 10—Report to I. C. C., 1920	467	3
Sheet 201—Comparative general balance sheet, liability side	467	3
Sheet 303—Railway operating revenues	488	3
Sheets 304 to 309 and 304*a* to 309*a*, Inclusive—Railway operating expenses	489	3
Sheets 508 and 509—Revenue freight carried during year	511	3
Record from superior court of Thurston County	9	3
Testimony of O. O. Calderhead	9	3
M. Nicholson (extracts from)	193	4
J. W. Mount (extracts from)	875	4
Paul Webb	1014	4
J. E. Frost	1043	6
Joseph Irving	1175	12
E. C. Richmond (extracts from)	1278	14
J. G. Dickson	1303	15
Stipulation for printing additional portions of record	1369	19

Exhibit No. 35, Page 5—Table showing estimated cost of that portion of N. P. Ry. Co.'s main branch lines west of Ellensburg, etc..... 225–5 198
N. P. Exhibit No. 36—Statement showing Washington intrastate traffic on logs, 1919-1920..... 226 199
C., M. & St. P. Ry. Co. No. 28—Statement showing distance rates on logs in dollars and cents per 1,000 feet compared with distance rates on slabwood, etc..... 324 201
Associated Log Shippers' Exhibit No. 6—Graph showing Western Washington trainload rates prior to August 26, 1920 ..... 196*a* 11 & 11½ 202

[fol. 18] Department of Public Works. Received Nov. 23, 1921

BEFORE THE DEPARTMENT OF PUBLIC WORKS OF THE STATE OF WASHINGTON

No. 5159

DEPARTMENT OF PUBLIC WORKS, Formerly PUBLIC SERVICE COMMISSION OF WASHINGTON, Complainant,

vs.

ORTHERN PACIFIC RAILWAY COMPANY, GREAT NORTHERN RAILway Company, Chicago, Milwaukee & St. Paul Railway Company, and Oregon-Washington Railroad & Navigation Company, Respondents.

PROTEST

I am in receipt of a copy of Local Freight Tariff No. 29, naming mmodity and distant rates on saw logs, car loads, filed on behalf of e C. M. & St. P., G. N., N. P., O. W. R. R. & N., and S. I.

There is doubt in my mind as to whether or not this tariff can now e accepted by the Commission except as a proposal in Cause No. 59, being Public Service Commission of Washington, Now Dertment of Public Works, vs. N. P. et al.

If, when the Department enters upon a formal investigation of e rates of the carriers, which investigation is brought about, either a complaint on the part of the Department, or any other party titled to file complaint, the carriers can file a schedule of rates enely independent of the hearing in progress, such action immediely brings about a hearing on the new schedule, and when the aring starts on the new schedule, the carriers can file another hedule and bring on another hearing on the next schedule, and on, ad infinitum.

[fol. 19] If the Department should make an order in Cause No. 59, that order would not settle anything for the reason that there uld still be issues involved with reference to the new tariff.

Further, if the Department should make an order in Cause No. 59, and if for any reason that order should be reviewed, and beuse of some error set aside, a serious question would be presented to whether the tariff in effect at the time Cause No. 5159 was tiated would be the controlling tariff, or whether or not the new iff No. 29 would become effective following an unfavorable deion by the courts.

If, between the time of the filing of the order in 5159, the carrier uld file another tariff, there would be such a confusion of issues o make confusion confounded.

Section #89 of the original act, being Section #8626-89, Remton's 1915 Code, provides for a rehearing for the Public Service

Company, feeling itself *agreed* by an order of the Department, and grants such a rehearing after the expiration of two years.

Provision is further made for a rehearing within six months from and after the date of the taking effect of such order, if such order is complied with by the Public Service Company without review. This section seems to negative the idea that a carrier can get a rehearing by the simple filing of a new tariff.

After the hearing has been completed, and before an order has been issued, the filing of a new tariff differing from the one under investigation brings about a rehearing either before the order of the Commission or after, in violation of the spirit of the statute.

Giving consideration to the Public Service Law as a whole, and to all of its provisions, it would seem apparent that the procedure followed by the carriers in filing the recent tariff after the hearing [fols. 20-23] has been closed, and as a separate proceeding is not permissible. Such a practice, if approved or permitted certainly opens the door for confusion which the statute does not contemplate, and which confusion the law certainly is intended to eliminate.

In order to avoid this conclusion, the writer, on behalf of the Associated Log Shippers repeatedly protested against the filing of this tariff as a tariff, and repeatedly refused to make any stipulation with reference to such a tariff.

The last statement appearing in the record with reference to this tariff is as follows:

"I am not going to stipulate anything on that tariff."

Had the Department, after a full hearing in Cause No. 5159 determined that the carriers had sustained the burden of proof, and that the present rates were reasonable and had established the present rates as reasonable, that would have been the end of the case. If this new tariff is received under the scheme devised by the carriers, and the Department makes any order varying in any way from the provisions of Tariff No. 29, and if the Department should be in error in any particular, and for that reason reversed by the court, then through this proceeding, the carriers would have secured an enormous increase by having Tariff No. 29 become effective. Certainly it was never the intention of the law that the carriers could secure such an enormous increase by such a scheme.

On behalf of the Associated Log Shippers, we protest the filing of the said Tariff No. 29, and ask the Department to take such steps as will prevent Tariff No. 29 from becoming effective.

Respectfully submitted, Scott Z. Henderson, Attorney for Associated Log Shippers.

[fol. 24] BEFORE THE DEPARTMENT OF PUBLIC WORKS OF WASHINGTON

5330

DEPARTMENT OF PUBLIC WORKS OF WASHINGTON, Complainant,

vs.

NORTH PACIFIC COAST FREIGHT BUREAU, S. J. HENRY, Agent, et al., Respondents.

Hearing

TRANSCRIPT OF HEARING

This cause coming on for hearing pursuant to notice duly given at Olympia, Washington, December 20, 1921, before E. V. Kuykendall, Director, and Hance H. Cleland, Supervisor of Public Utilities, H. S. Taylor reporting the proceedings, the following proceedings were had:

Mr. L. B. Da Ponte appeared in behalf of the carriers.

Mr. F. M. Cleveland appeared for the N. P. Ry. Company.

Mr. John E. Belcher, Rust Bldg., Tacoma, appeared for Cady Logging Co.

Mr. A. W. Dolphin, Legal Assistant, appeared for the Department.

It was orally stipulated between Mr. Belcher for the Cady Logging Company and Mr. da Ponte for the Northern Pacific Railway Company that causes No. 5336 and No. 5337, Cady Logging Company vs. Northern Pacific Railway Company, may be consolidated with causes 5159 and 5330.

The Director, having formally opened the hearing, said:

Mr. Belcher, are you willing to join in the stipulation that was made at the close of the last hearing to the effect that testimony taken in the general log rate case should be the testimony to be considered in determining the reasonableness of the rates in the tariff now under suspension filed by the carriers?

By Mr. Belcher: Yes, sir.

The Director: We have a telegram from the Port Angeles Com-[fol. 25] mercial Club which reads as follows:

"To the Department of Public Works, Olympia, Washington:

The Port Angeles Commercial Club protests against an increase in the log rates by rail as proposed which in this section would make it an economic impossibility for mills to profitably operate unless able to get their logs by water. We believe that possibly an increase of twenty-five per cent over the rate prevailing before the war would be fair and equitable on this business. The railroads must expect their profit out of the long haul on the finished product, assisting the mills to get the logs to tide water at a rate that will permit the busi-

ness to move without a handicap that would threaten everything and possibly mean a virtual slowing down of all mill activities dependent upon rail haulage of their raw material.

Port Angeles Commercial Club. Donald McInnes, President.
Will H. Taylor, Secretary."

We also have a telegram from J. J. Donovan, saying

"I expected testify before you in log rate cases today but storm prevented. Will you admit brief statement or affidavit or must all testimony be oral please answer at Bellqingham.

J. J. Donovan."

Are the carriers willing to stipulate that he may send in his affidavit?

Mr. Da Ponte: I have no objections to his filing his affidavit.

The Director: We might receive the affidavit and serve copy on the carriers and if they desire to file a counter affidavit they may do so, say within five days.

Mr. Da Ponte: That is agreeable.

The Director: It is stipulated that Mr. Donovan may file a brief statement or affidavit in this case, copy to be served upon the carriers, with the understanding that they may file a counter affidavit if they so desire within five days after receiving the copy.

In compliance with the stipulation entered into in the general log [fol. 26] case, No. 5159, that cause can be consolidated with No. 5330, the present case, and all of the testimony received in Cause 5159 will be considered in cause 5330, as well as all exhibits introduced in evidence.

I would state further that the causes having been consolidated, only one order will be issued on final determination of that cause.

Is there anything further that any one desires to offer?

Mr. Belcher: Nothing further as far as I am concerned.

Mr. Da Ponte: I have nothing.

The Director: The hearing is adjourned.

[fol. 196a] STATEMENT RE REVISED EXHIBITS

These exhibits were compiled by Henry L. Gray, member American Society of Civil Engineers, Member American Institute of Electrical Engineers, 840 Henry Building, Seattle, Washington.

[fol. 196a–1] Analysis of Associated Log Shippers' Exhibits

Revised Exhibit One was prepared for the purpose of demonstrating that the freight transportation revenue obtained by the four principal carriers within the state of Washington, per unit of 1,000 net ton miles, is greater than the corresponding revenue earned upon the several systems as a whole. This is clearly shown by the figures given for 1919 and 1920. In other words, it cannot be said that the

state of Washington is not providing its pro rata portion of the total freight revenue. Incidentally, this exhibit, used in connection with Revised Exhibit 2, shows that the 1920 unit revenue from log traffic, or the revenue per 1,000 net ton miles, is considerably greater than the average unit revenue earned within the state. The comparison is as follows:

Revenue per 1,000 Net Ton Miles

	Total traffic	Log traffic
N. P.	$12.26	$12.79
G. N.	12.41	17.02
C. M.	9.92	17.06
O. W.	13.28	24.74
Combined	$11.97	15.07

[fol. 196a–2] Revised Exhibit 2 relates solely to intrastate log traffic as handled within the state of Washington by the four principal carriers during 1920. In brief, it shows the average loading to have been 7,462 board feet, or somewhat in excess of the ordinary minimum of 7,000 feet. It shows the average haul to have been 27.42 miles, and the average revenue per 1,000 net ton miles to have been $15.07. The Northern Pacific received the smallest unit revenue, that of the Great Northern the next, the Chicago-Milwaukee being third, while the Oregon-Washington received a unit revenue considerably in excess of the average. It will be noticed that the Oregon-Washington had an average haul per loaded car of less than one-half that of the Northern Pacific, and yet its revenue per loaded car was about the same as that of the Northern Pacific.

Revised Exhibit 3 was compiled for the purpose of ascertaining just how the 1920 unit revenue from log traffic compared with the unit revenue from other intrastate traffic, as well as from interstate traffic, and from the state traffic as a whole. In general, it was found that the revenue per 1,000 net ton miles of interstate freight other than logs was in excess of the corresponding revenue from the log traffic, the log traffic revenue, however, being greater than the unit revenue from all traffic. But in the case of the Oregon-Washington, the unit revenue from log traffic was somewhat in excess of the unit [fol. 196a–3] revenue from other intrastate traffic. It should be noted that the relations shown between revenues depend altogether upon the relation between intrastate and interstate ton miles within the state. The ton miles, intrastate and interstate, as reported by the carriers, are so widely at variance with the corresponding figures found by the Railroad Commission in its investigation of 1906, as to suggest that one of the two sets of figures may be incorrect.

Revised Exhibit 3-A shows that the unit operating expenses charged to the state of Washington in 1920 by the four principal carriers were considerably greater than the corresponding unit expenses for their systems as a whole; the cost of operation charged to Washington by the combined carriers being $6.09 per 1,000 gross ton miles, while

the corresponding figure for the combined systems was only $1.48 per 1,000 gross ton miles. In other words, the operating expenses allocated to the state of Washington are 36 per cent in excess of the average unit expenses for the combined systems, or 43 per cent in excess of the average unit expenses of all parts of the combined systems other than the state of Washington. As the state expenses shown by the carriers are used by them to demonstrate the unprofitableness of the log traffic, it seems advisable for the Department to give some thought to the question of the apportionment of operating costs.

Revised Exhibit 4 really tells the story. From this exhibit it is seen that had the unit cost of hauling logs within the state during [fol. 196a–4] 1920 been no greater than the unit cost of hauling all products within the state, or $6.090 per 1,000 gross ton miles, then the log traffic would have yielded a profit, while all other traffic would have been carried at a tremendous loss. From this exhibit it will be noted that during 1920, the carriers as a whole operated at a freight operating cost of $52,308,268, the corresponding revenue (excluding all incidental revenue) having been only $43,884,320, so that apparently the 1920 freight operations within the state of Washington were conducted at a loss of $8,423,948, or a loss of approximately $0.981 per 1,000 gross ton miles.

In other words, if during the year 1920 the unit cost of handling log traffic was 45.8 per cent in excess of the average unit cost of handling all traffic within the state, then the log traffic was exactly on a par with the total traffic within the state, and earned or lost at exactly the same rate. If the unit cost of handling log traffic was less than 45.8 per cent of the average unit cost of handling all traffic within the state, then the log traffic was the more profitable; and if the unit cost of handling log traffic was more than 45.8 per cent of the unit cost of handling other traffic, then the log traffic was less profitable than the other traffic in the state. So that when dealing with the four carriers as a whole, the correct answer to the question as to whether or not the log traffic is more or less profitable [fol. 196a–5] than other traffic depends entirely upon whether or not the cost of hauling logs is greater or less than 146 per cent of the average unit cost of hauling all commodities within the state.

Exhibit 5 contains a series of log rate schedules, compiled from the Department's Exhibit 1. It is interesting in that it shows the general tendency of each of the several rates. It has not been revised, and is not inserted here. It should be accompanied by Exhibit 6, which is a blue print diagram showing in general the manner of deriving the rates shown in Exhibit 5.

Exhibit 7 is a new exhibit, not having been introduced at the previous hearing. It was compiled from data furnished by the log shippers, and covers approximately one-half of the rail shipments within the state. It is unfortunate that in many instances large shippers holding contracts failed to supply the information desired, with which the exhibit could have been made quite complete; but as the exhibit covers approximately one-half of the total shipments within the state during 1920, which called for freight bills of more than $2,000,000, it should be sufficiently representative. This

xhibit speaks for itself, and probably will be commented upon in he direct testimony.

[fol. 211]

EXHIBIT 17 A

Special 150-B, Supplementary

Northern Pacific Railway Company

Freight Operating Statistics, September, October and November, 1920

Seattle-Tacoma Main Line (including Puget Sound Division)—Freight Operating Expense		$2,053,484
Gross Ton Miles—Special 150-A		273,781,365
Estimated charges per 1,000 gross ton miles		$7.50
Log traffic gross ton miles—Main Line:		
Loaded Car Miles	201,925	
Empty Car Miles	201,925	
	403,850	
Figuring tare weight of 18 tons per car		7,269,300
Add main line net ton miles (24.87% of 25,723,311)		6,397,388
Estimated gross ton miles main line log traffic		13,666,688
13,666,688 gross ton miles at $7.50 per mile		$102,500.16

Estimated cost of operation:

Seattle and Tacoma branch lines—Freight operating expenses	$983,657	
Gross ton miles—special 150-A	125,225,855	
Estimated charges per 1,000 gross ton miles	$7.86	
Log traffic gross ton miles—Branch Lines:		
Loaded Car Miles 609,998		
Empty Car Miles 609,998		
	1,219,996	
Figuring 18 tons per car as tare weight...	21,959,928	
Add branch line net ton miles log traffic.	19,325,923	
	41,285,851	
41,285,851 estimated gross ton miles at $7.86.....		$324,506.79
Operating expense assigned to log traffic.....		427,006.95
Revenue		376,871.79
Net deficit from operation.....(Red)		50,135.16

Slight variation over 150-B account estimates used as between main and branch lines.

200L. Comparative General Balance Sheet—Liability Side

For instructions covering this schedule, see the text pertaining to General Balance Sheet Accounts in the Uniform System of Accounts for Steam Railway Corporations. The entries in this balance sheet should be consistent with those in the supporting schedules on the pages indicated. The entries in the short column (b_2) should be deducted from those in column (b_1) in order to obtain corresponding entries for column (c). All debit entries hereunder should be in red ink. The making of entries in column (d) is optional.

Line No.	Balance at beginning of year (a)		Item (b)	(b_1) Total book liability at close of year.	(b_2) Respondent's holdings included in (b_1).	Schedule No.	Balance at close of year (c)		Net change during year. (Increase in black, decrease in red) (d)
1			Stock						
2	$						$		$
3	248,000,000.00	(751)	Capital stock (p. 224)	248,000,000.00	None.	251	248,000,000.00		.....
4	.....	(752)	Stock liability for conversion (p. 225)	.....	.....	252	.....		.....
5	.....	(753)	Premium on capital stock	.....	.....		.....		.....
6	248,000,000.00		Total stock				248,000,000.00		.....
7			Governmental Grants						
8	.....	(754)	Grants in aid of construction				3,406.60		3,406.60
9			Long-Term Debt						
10	.....			(b_1) Total book liability at close of year.	(b_2) Respondent's holdings included in (b_1).		.....		.....
11	309,721,500.00	(755)	Funded debt unmatured (p. 226)*	324,214,500.00	9,149,500.00	261M	315,065,000.00		5,343,500.00
12	.....	(756)	Receiver's certificates (p. 229)	.....	.....	262	.....		.....
13	.....	(757)	Nonnegotiable debt to affiliated companies	.....	.....		.....		.....
14	.....		(A) Notes (p. 230)			263	.....		.....
15	.....		(B) Open accounts (p. 230)			263	.....		.....
16	309,721,500.00		Total long-term debt				315,065,000.00		5,343,500.00
17			Current Liabilities						
18	.....	(758)	Loans and bills payable (p. 235)			271	.....		.....
19	1,066.92	(759)	Traffic and car-service balances payable				1,254,255.54		1,253,188.62
20	515,074.73	(760)	Audited accounts and wages payable				11,512,467.55		10,997,392.82
21	32,516.56	(761)	Miscellaneous accounts payable				841,200.38		808,683.82
22	2,079,052.25	(762)	Interest matured unpaid				1,830,860.44	D	248,191.81
23	.....	(763)	Dividends matured unpaid				.....		.....
24	10,000.00	(764)	Funded debt matured unpaid (p. 235)†			275	.....	D	10,000.00
25	4,340,000.00	(765)	Unmatured dividends declared				4,340,000.00		.....
26	467,917.50	(766)	Unmatured interest accrued				528,973.61		60,156.11
27	6,176.66	(767)	Unmatured rents accrued				6,147.20	D	29.46
28	.....	(768)	Other current liabilities				395,542.92		395,542.92
29	7,451,804.62		Total current liabilities				20,708,547.64		13,256,743.02
30			Deferred Liabilities						
31	.....	(769)	Liability for provident funds				.....		.....
32	28,158,416.73	(770)	Other deferred liabilities				29,209,117.01		11,150,700.28

† Total water-

33	28,158,416.73		Total deferred liabilities		39,309,117.01		11,150,700.28
34			**Unadjusted Credits**				
35	1,614,440.38	(771)	Tax liability		6,527,116.63		4,912,671.25
36	.....	(772)	Premium on funded debt		.....		.....
37	5,803,205.98	(773)	Insurance and casualty reserves		.....	D	5,803,205.98
38	.....	(774)	Operating reserves (p. 235)	284	1,771,257.68		1,771,257.68
39	.....	(775)	Accrued depreciation—Road (p. 238	285	.....		.....
40	32,800,425.89	(776)	Accrued depreciation—Equipment (p. 238)	285	35,473,839.97		2,673,414.08
41	.....	(777)	Accrued depreciation—Miscellaneous physical property (p. 238)	285	.....		.....
42	14,956,067.25	(778)	Other unadjusted credits (p. 235)	286	2,967,385.33	D	11,988,681.92
43	55,174,139.50		Total unadjusted credits		46,139,599.61	D	8,434,039.89
44			**Corporate Surplus**				
45	15,708.80	(779)	Additions to property through income and surplus		128,184.59		112,475.79
46	.....	(780)	Funded debt retired through income and surplus		15,214,356.79		15,214,356.79
47	.....	(781)	Sinking fund reserves		.....		.....
48	.....	(782)	Miscellaneous fund reserves		206,362.77		206,362.77
49	330,107.07	(783)	Appropriated surplus not specifically invested		.....	D	330,107.07
50	345,815.87		Total appropriated surplus		15,548,904.15		15,203,088.28
51	121,162,523.89	(784)	Profit and loss‡ credit balance		158,254,796.17		37,092,262.28
52	121,508,349.76		Total corporate surplus§		173,803,700.32		52,295,350.56
53	770,014,210.61		Grand Total		843,629,371.18		73,615,160.57

*Includes none of notes maturing not more than two years after the date thereof.
†Excludes none matured funded debt held by or for respondent and not canceled.
‡Insert "Debit" or "Credit," as may be appropriate.
§Deficit, if in red.

310. Railway Operating Revenues

State the railway operating revenues on respondent's road for the year regardless of changes in form of control (classified in accordance with the Uniform System of Accounts for Steam Railway Corporations), and the comparison of such revenues with those of the preceding year (showing increases in black and decreases in red) for each of the several classes. The proportion of joint traffic receipts belonging to other carriers should not be included in columns (b) and (e).

Line No.	Class of railway operating revenues (a)	Amount of revenue for the year (b)	Comparison with revenue of preceding year. (Increases in black, decreases in red) (c)	Class of railway operating revenues (d)	Amount of revenue for the year (e)	Comparison with revenue of preceding year. (Increases in black, decreases in red) (f)
		$ c.	$ c.		$ c.	$ c.
1.	(101) Freight	81,090,389.63	8,155,667.04	(131) Dining and buffet	873,903.03	61,662.03
2.	(102) Passenger	21,143,707.94	812,390.48	(132) Hotel and restaurant	1,053,046.89	134,784.08
3.	(103) Excess baggage	188,563.29	1,226.14	(133) Station, train, and boat privileges	5,846.61 D	183.51
4.	(104) Sleeping car	.....	.....	(134) Parcel room	58,883.25	6,081.19
5.	(105) Parlor and chair car	88,850.57	17,691.61	(135) Storage—Freight	113,638.49 D	80,695.84
6.	(106) Mail	2,891,069.40	1,938,107.25	(136) Storage—Baggage	39,061.53	107.62
7.	(107) Express	2,326,076.90	304,817.35	(137) Demurrage	439,975.07	89,751.67
8.	(108) Other passenger-train	503,740.13	645,936.53	(138) Telegraph and telephone	295,426.32	52,922.15
9.	(109) Milk	.....	.....	(139) Grain elevator	.....	.....
10.	(110) Switching	1,335,399.15	136,327.70	(140) Stockyard	.....	.....
11.	(111) Special service train	41,868.70 D	5,675.12	(141) Power	.....	.....
12.	(112) Other freight-train	866.92	533.98	(142) Rents of buildings and other property	45,580.19	3,588.64
13.	(113) Water transfers—Freight	.....	.....	(143) Miscellaneous	287,179.54	38,768.97
14.	(114) Water transfers—Passenger	.....	.....	Total incidental operating revenues	3,212,540.92	306,787.00
15.	(115) Water transfers—Vehicles and live stock	.....	.....	(151) Joint facility—Cr.	268,116.27	32,980.92
16.	(116) Water transfers—Other	.....	.....	(152) Joint facility—Dr.	6,782.04 D	1,757.03
	Total rail-line transportation revenue	109,610,532.63	12,007,042.96	Total joint facility operating revenue	261,334.23	31,223.89
				Total railway operating revenue	113,084,407.78	12,345,053.85
18.	(121) Freight	.....	.....			
19.	(122) Passenger	.....	.....			
20.	(123) Excess baggage	.....	.....			
21.	(124) Other passenger service	.....	.....			
22.	(125) Mail	.....	.....			
23.	(126) Express	.....	.....			
24.	(127) Special service	.....	.....			
25.	(128) Other	.....	.....			
	Total water-					

line transportation revenue ...	None.	None.

330. Miscellaneous Operations

State the revenues and operating expenses of the respondent resulting from its several miscellaneous operations for the year, the resulting net revenues therefrom, and the comparison of such net revenues with those from the several like operations of the preceding year. Show increases in black and decreases in red. The respondent's investment in properties, the results of whose operations are reported in this schedule, should be shown in schedule No. 212, "Miscellaneous physical property" (p. 207).

Line No.	Class of miscellaneous operations (a)	Amount of revenue for the year (b)	Amount of operating expenses for the year (c)	Net revenue for the year (d)	Comparison with net revenue of preceding year. (Increases in black, decreases in red) (e)	Taxes charged to "taxes on miscellaneous operating property" (f)
		$ c.	$ c.	$ c.	$ c.	$ c.
1.	.....	.....	.....	.....	.....	.....
2.	None.....	.....	.....	.....	.....	.....
3.	.....	.....	.....	.....	.....	.....
4.	.....	.....	.....	.....	.....	.....
5.	.....	.....	.....	.....	.....	.....
6.	.....	.....	.....	.....	.....	.....
7.	.....	.....	.....	.....	.....	.....
8.	Total	.....	.....	.....	.....	.....

Give the particulars called for concerning the commodities carried on the respondent's road during the year, classifying them in accordance with the Commission's Order In the Matter of Freight Commodity Statistics, effective on January 1, 1920, the revenue from which is includible in account No. 101, "Freight." In stating the number of tons received from connecting carriers, include all connecting carriers, whether rail or water, and whether the freight is received directly or indirectly (as through elevators).

Particulars for Classes Nos. 1 to 69 should include carload traffic only, all less than carload traffic being included in Class No. 70.

Class No.	Commodity (a)	Revenue freight originating on respondent's road		Revenue freight received from connecting carriers		Total revenue freight carried		Remarks (h)
		Number of carloads (b)	Number of tons (2,000 lbs.) (c)	Number of carloads (d)	Number of tons (2,000 lbs.) (e)	Number of carloads (f)	Number of tons (2,000 lbs.) (g)	
	Products of Agriculture							
1	Wheat	35,461	1,425,969	7,772	311,189	43,233	1,737,158	
2	Corn	1,186	41,067	1,889	71,181	3,075	112,248	
3	Oats	2,928	97,013	1,013	33,837	3,941	130,850	
4	Other grain	6,340	244,606	1,528	58,219	7,868	302,825	
5	Flour and meal	14,172	475,069	1,614	57,269	15,786	532,338	
6	Other mill products	8,728	254,200	694	18,598	9,422	272,798	
7	Hay, straw, and alfalfa	29,550	378,802	4,723	61,835	34,273	440,637	
8	Tobacco	8	142	62	943	70	1,085	
9	Cotton	....	....	1,091	18,538	1,091	18,538	
10	Cotton seed and products, except oil	17	264	65	1,636	82	1,900	
11	Citrus fruits	63	858	1,331	23,398	1,394	24,256	
12	Other fresh fruits	9,395	169,253	5,760	80,508	15,155	249,761	
13	Potatoes	12,764	240,821	1,201	23,203	13,965	264,024	
14	Other fresh vegetables	1,330	20,186	1,131	16,051	2,461	36,237	
15	Dried fruits and vegetables	532	15,282	588	18,408	1,120	33,690	
16	Other products of agriculture	5,486	195,418	1,913	48,484	7,399	243,902	
	Total	127,960	3,558,950	32,375	843,297	160,335	4,402,247	
	Products of Animals							
17	Horses and mules	1,200	14,080	639	7,238	1,839	21,318	
18	Cattle and calves	13,120	154,431	3,884	46,601	17,004	201,032	
19	Sheep and goats	4,211	45,604	861	9,575	5,072	55,179	
20	Hogs	4,135	41,465	405	4,094	4,540	45,559	
21	Fresh meats	2,292	30,668	944	13,420	3,236	44,088	
22	Other packing-house products	465	7,521	223	3,812	688	11,333	
23	Poultry	71	819	6	73	77	892	
24	Eggs	397	5,264	73	956	470	6,220	
25	Butter and cheese	587	6,981	66	1,033	653	8,014	
26	Wool	332	5,164	105	1,643	437	6,807	
27	Hides and leather	416	9,280	152	3,695	568	12,975	
28	Other products of animals	469	9,939	648	15,205	1,117	25,144	
	Total	27,695	331,216	8,006	107,345	35,701	438,561	
	Products of Mines							
29	Anthracite coal	15,772	601,903	27	1,160	15,799	603,063	
30	Bituminous coal	72,139	3,019,080	31,491	1,245,182	103,630	4,264,262	
31	Coke	2,492	71,552	1,264	36,194	3,756	107,746	
32	Iron ore	15,079	734,658	188	9,118	15,267	743,776	

33	Other ores and concentrates	11,113	516,094	1,986	87,849	13,099	603,943
34	Base bullion and matte	661	29,563	1	55	662	29,618
35	Clay, gravel, sand, and stone	14,610	740,667	3,203	143,978	17,813	884,645
36	Crude petroleum	....	....	882	30,002	882	30,002
37	Asphaltum	65	1,693	218	6,872	283	8,565
38	Salt	1,162	29,427	593	15,649	1,755	45,076
39	Other products of mines	78	1,696	159	5,644	237	7,340
	Total	133,171	5,746,333	40,012	1,581,703	173,183	7,328,036
	Products of Forests						
40	Logs, posts, poles, and cordwood	125,156	3,987,116	7,007	171,021	132,163	4,158,137
41	Ties	1,474	52,503	1,182	33,833	2,656	86,336
42	Pulp wood	757	24,638	2,134	71,332	2,891	95,970
43	Lumber, timber, box shooks, staves, and headings	71,148	2,110,485	25,967	770,896	97,115	2,881,381
44	Other products of forests	710	15,967	614	15,874	1,324	31,841
	Total	199,245	6,190,709	36,904	1,062,956	236,149	7,253,665
	Manufactures and Miscellaneous						
45	Refined petroleum and its products	6,973	186,029	9,971	263,557	16,944	449,586
46	Vegetable oils	440	13,296	582	17,571	1,022	30,867
47	Sugar, sirup, glucose, and molasses	639	17,803	1,470	42,256	2,109	60,059
48	Boats and vessel supplies	23	234	17	216	40	450
49	Iron, pig and bloom	1,073	52,271	334	15,549	1,407	67,820
50	Rails and fastenings	609	20,943	854	39,614	1,463	60,557
51	Bar and sheet iron, structural iron, and iron pipe	2,824	89,224	4,969	209,208	7,793	298,432
52	Other metals, pig, bar, and sheet	971	39,667	870	34,961	1,841	74,628
53	Castings, machinery, and boilers	3,060	57,657	1,829	35,337	4,889	92,994
54	Cement	4,303	159,812	4,361	168,341	8,664	328,153
55	Brick and artificial stone	2,426	86,412	1,631	57,760	4,057	144,172
56	Lime and plaster	729	17,328	1,010	31,535	1,739	48,863
57	Sewer pipe and drain tile	594	10,792	863	15,171	1,457	25,963
58	Agricultural implements and vehicles other than automobiles	2,644	35,877	3,209	44,210	5,853	80,087
59	Automobiles and autotrucks	1,779	12,187	5,545	42,954	7,324	55,141
60	Household goods and secondhand furniture	4,383	48,227	1,951	21,747	6,334	69,974
61	Furniture (new)	450	4,074	497	4,949	947	9,023
62	Beverages	901	17,182	296	5,559	1,197	22,741
63	Ice	2,701	89,855	42	1,213	2,743	91,068
64	Fertilizers (all kinds)	581	20,229	85	2,625	666	22,854
65	Paper, printed matter, and books	2,307	60,810	3,175	85,166	5,482	145,976
66	Chemicals and explosives	1,027	22,734	1,010	29,302	2,037	52,036
67	Textiles	69	1,624	164	3,329	233	4,953
68	Canned goods (all canned food products)	1,825	53,319	2,150	66,597	3,975	119,916
69	Other manufactures and miscellaneous	18,910	481,355	14,365	356,829	33,275	838,184
	Total	62,241	1,598,941	61,250	1,595,556	123,491	3,194,497
	Grand Total, Carload Traffic	550,312	17,426,149	178,547	5,190,857	728,859	22,617,006
70	Merchandise—All L. C. L. freight	....	677,103	....	154,073	....	831,176
	Grand Total, Carload and L. C. L. Traffic	550,312	18,103,252	178,547	5,344,930	728,859	23,448,182

†Not required from switching and terminal companies of classes S1 to S4 as described in section 7 of "Notice" facing title page.

310. Railway Operating Revenues

[For Companies Making Operating Reports]

State the railway operating revenues of the respondent for the year (classified in accordance with the Uniform System of Accounts for Steam Railway Corporations), and the comparison of such revenues with those of the preceding year (showing increases in black and decreases in red) for each of the several classes. The proportion of joint traffic receipts belonging to other carriers should not be included in column (b).

Line No.	Class of railway operating revenues (a)	Total amount of revenue for the year (b)	Comparison with total revenue of preceding year. (Increases in black, decreases in red) (c)	Revenues earned within the State		
				On intrastate traffic (d)	On interstate traffic (e)	Total (f)
1	(101) Freight	81,090,389.63	8,155,667.04	8,792,969.15	11,322,784.12	20,115,753.27
2	(102) Passenger	21,143,707.94	812,390.48	3,422,658.60	2,550,894.66	5,973,553.26
3	(103) Excess baggage	188,563.29	1,226.14	30,553.16	22,771.95	53,325.11
4	(104) Sleeping car	.....	.....	.....	.....	.....
5	(105) Parlor and chair car	88,850.57	17,691.61	24,782.38	18,467.85	43,250.23
6	(106) Mail	2,891,069.40	1,938,107.25	.....	670,165.65	670,165.65
7	(107) Express	2,326,076.90	304,817.35	.....	678,632.34	678,632.34
8	(108) Other passenger-train	503,740.13	645,936.53	1,900.27	129,627.26	131,527.53
9	(109) Milk	.....	.....	.....	.....	.....
10	(110) Switching	1,335,399.15	136,327.70	620,072.74	.....	620,072.74
11	(111) Special service train	41,868.70	#5,675.12	4,224.75	11,058.59	15,283.34
12	(112) Other freight-train	866.92	553.98	327.67	.....	327.67
13	(113) Water transfers—Freight	.....	.....	.....	.....	.....
14	(114) Water transfers—Passenger	.....	.....	.....	.....	.....
15	(115) Water transfers—Vehicles and livestock	.....	.....	.....	.....	.....
16	(116) Water transfers—Other	.....	.....	.....	.....	.....
17	Total rail-line transportation revenue	109,610,532.63	12,007,042.96	12,897,488.72	15,404,402.42	28,301,891.14
18	(121) Freight	.....	.....	.....	.....	.....
19	(122) Passenger	.....	.....	.....	.....	.....
20	(123) Excess baggage	.....	.....	.....	.....	.....
21	(124) Other passenger service	.....	.....	.....	.....	.....
22	(125) Mail	.....	.....	.....	.....	.....
23	(126) Express	.....	.....	.....	.....	.....
24	(127) Special service	.....	.....	.....	.....	.....
25	(128) Other	.....	.....	.....	.....	.....
26	Total water-line transportation revenue	None.	None.	.....	.....	.....
27	(131) Dining and buffet	873,903.03	61,662.03	149,881.71	111,691.96	261,573.67
28	(132) Hotel and restaurant	1,053,046.89	134,784.08	270,499.70	.....	270,499.70
29	(133) Station, train, and boat privileges	5,846.61	#183.51	2,190.61	.....	2,190.61
30	(134) Parcel room	58,883.25	6,081.19	20,226.65	.....	20,226.65
31	(135) Storage—Freight	113,638.49	#80,695.84	33,872.25	.....	33,872.25
32	(136) Storage—Baggage	39,061.53	107.62	22,492.63	.....	22,492.63
33	(137) Demurrage	439,975.07	89,751.67	148,343.51	.....	148,343.51
34	(138) Telegraph and telephone	295,426.32	52,922.15	.....	98,481.61	98,481.61
35	(139) Grain elevator	.....	.....	.....	.....	.....
36	(140) Stockyard	.....	.....	.....	.....	.....
37	(141) Power					

38	(142) Rents of buildings and other property	45,580.19	3,588.64	17,507.27	.....	17,507.27
39	(143) Miscellaneous	287,179.54	38,768.97	74,779.21	11,043.50	85,822.71
40	Total incidental operating revenue..	3,212,540.92	306,787.00	739,793.54	221,217.07	961,010.61
41	(151) Joint facility—Cr.	268,116.27	32,980.92	17,806.02	.....	17,806.02
42	(152) Joint facility—Dr.	6,782.04	‡1,757.03	‡5,743.22	.....	‡5,743.22
43	Total joint facility operating revenue.	261,334.23	31,223.89	12,062.80	.....	12,062.80
44	Total railway operating revenues...	113,084,407.78	12,345,053.85	13,649,345.06	15,625,619.49	29,274,964.55

50. State the rule or rules used by the respondent in assigning revenues from interstate traffic to the several States in which such traffic moves.

‡Red Fig.

Northern Pacific Railway Company

Freight Traffic Movement—State of Washington—Fiscal Year ending December 31, 1920

(Company's Material Excluded)

508a

Commodity	Freight originating on this road within the State		Freight received from connecting carriers within the State		Total freight forwarded		
	No. of cars	Whole tons	No. of cars	Whole tons	No. of cars	Whole tons	Per cent
Products of Agriculture:							
heat	7,788	297,077	4,925	198,243	12,713	495,320	4.85
rn	106	3,215	71	2,567	177	5,782	.06
ts	516	15,640	284	9,784	800	25,424	.25
her grain	395	12,477	168	5,887	563	18,364	.18
ur and meal	5,220	175,658	988	36,877	6,208	212,535	2.08
her mill products	4,300	124,435	354	10,691	4,654	135,126	1.32
y, straw, and alfalfa	17,451	224,881	1,898	25,983	19,349	250,864	2.45
bacco	7	129	16	349	23	478	...
tton	..	..	15	206	15	206	...
tton seed and products, except oil	5	76	2	50	7	126	...
rus fruits	8	115	23	414	31	529	.01
her fresh fruits	8,262	151,117	1,838	32,225	10,100	183,342	1.79
tatoes	2,986	55,470	381	7,545	3,367	63,015	.62
her fresh vegetables	816	12,411	198	3,128	1,014	15,539	.15
ied fruits and vegetables	147	4,323	423	13,745	570	18,068	.18
her products of agriculture	1,385	46,653	1,057	26,865	2,442	73,518	.72
Total	49,392	1,123,677	12,641	374,559	62,033	1,498,236	14.66
Products of Animals:							
rses and mules	265	2,950	131	1,460	396	4,410	.04
ttle and calves	1,534	18,999	554	6,701	2,088	25,700	.25
eep and goats	1,012	11,049	534	5,972	1,546	17,021	.17
gs	359	3,566	39	376	398	3,942	.04
esh meats	639	8,111	28	444	667	8,555	.08
her packing-house products	180	3,258	10	174	190	3,432	.03
ultry	6	90	1	15	7	105	...
gs	88	1,748	29	416	117	2,164	.02
tter and cheese	27	414	16	271	43	685	.01
ol	94	1,624	38	800	132	2,424	.03
des and leather	214	5,175	133	3,241	347	8,416	.08
her products of animals	219	5,077	385	8,948	604	14,025	.14
Total	4,637	62,061	1,898	28,818	6,535	90,879	.89
Products of Mines:							
thracite coal	....	....	....	....	....	....	....
uminous coal	24,287	1,198,824	1,832	81,863	26,119	1,280,687	12.53
ke	1,645	47,084	153	4,606	1,798	51,690	.51
n ore	25	728	...	...	25	728	.01
er ores and concentrates	22	690	129	5,483	151	6,173	.06
bullion and matte			1	55	1	55	

Clay, gravel, sand and stones	3,602	178,223	849	41,953	4,451	220,176	2.15
Crude petroleum	..	...	...	....	...	...	...
Asphaltum	37	878	135	4,158	172	5,036	.05
Salt	31	777	144	3,924	175	4,701	.05
Other products of mines	70	1,361	37	790	107	2,151	.02
Total	29,719	1,428,565	3,280	142,832	32,999	1,571,397	15.38
Products of Forests:							
Logs, posts, poles and cord wood	112,876	3,610,030	626	21,115	113,502	3,631,145	35.53
Ties	1,278	47,275	379	13,779	1,657	61,054	.60
Pulp Wood	25	853	192	5,714	217	6,567	.06
Lumber, timber, box shooks, staves & headings	55,507	1,680,151	16,398	508,525	71,905	2,188,676	21.42
Other products of forests	365	8,552	391	10,490	756	19,042	.18
Total	170,051	5,346,861	17,986	559,623	188,037	5,906,484	57.79
Manufactures and Miscellaneous:							
Refined petroleum and its products	1,799	56,383	949	27,973	2,748	84,356	.83
Vegetable oils	382	11,729	555	16,917	937	28,646	.28
Sugar, sirup, glucose and molasses	291	9,108	601	16,198	892	25,306	.25
Boats and vessel supplies	9	120	3	57	12	177	...
Iron, pig and bloom	5	217	47	2,336	52	2,553	.02
Rails and fastenings	362	11,864	57	2,344	419	14,208	.14
Bar and sheet iron, structural iron, & iron pipe	1,962	63,071	154	3,920	2,116	66,991	.66
Other metals, pig, bar and sheet	743	29,415	52	1,686	795	31,101	.30
Castings, machinery, and boilers	1,310	27,675	204	4,315	1,514	31,990	.31
Cement	1,084	40,124	1,143	45,567	2,227	85,691	.84
Brick and artificial stone	829	32,633	474	16,647	1,303	49,280	.48
Lime and plaster	174	5,508	418	12,645	592	18,153	.18
Sewer pipe and drain tile	237	4,660	287	5,457	524	10,117	.10
Agricultural implements and vehicles other than automobiles	524	8,508	160	1,995	684	10,503	.10
Automobiles and autotrucks	747	5,538	681	4,749	1,428	10,287	.10
Household goods and secondhand furniture	828	8,944	196	2,144	1,024	11,088	.11
Furniture (new)	230	2,299	68	726	298	3,025	.03
Beverages	281	6,479	35	792	316	7,271	.07
Ice	223	5,357	12	387	235	5,744	.06
Fertilizers (all kinds)	450	16,168	64	2,052	514	18,220	.18
Paper, printed matter, and books	200	4,777	308	7,847	508	12,624	.12
Chemicals and explosives	760	16,148	282	9,619	1,042	25,767	.25
Textiles	40	1,173	39	925	79	2,098	.02
Canned goods (all canned food products)	1,584	47,421	1,273	41,117	2,857	88,538	.87
Other manufactures and miscellaneous	8,754	220,553	2,521	63,628	11,275	284,181	2.78
Total	23,808	635,872	10,583	292,043	34,391	927,915	9.08
Total Carload Traffic	277,607	8,597,036	46,388	1,397,875	323,995	9,994,911	97.80
Merchandise—All L. C. L. freight	....	199,463	.....	25,159	.....	224,622	2.20
Grand Total	277,607	8,796,499	46,388	1,423,034	323,995	10,219,533	100.00

Office of Auditor Freight Receipts. St. Paul, Minn., Mar. 28th, 1921.

COPY BOUND CLOSE IN CENTER

[fol. 289] C., M. & St P. Ry. Co.—Exhibit I

Chicago, Milwaukee and St. Paul Railway Company

Accounting Department

Property Investment as of December 31st, 1919, C., M. & St. P. Railway Company and Subsidiaries, (the income of which is included in the operating income of the reporting carrier) and which was presented by L. E. Wettling in the hearing before the Interstate Commerce Commission, in ex parte 74

Total Property Investment—December 31st, 1919			$665,726,293.00
Total miles of all track, represented by property investment above and which was presented by L. E. Vettling in the hearing before the Interstate Commerce Commission in Ex Parte 74		14,844.91	
Total miles of all track, State of Washington		1,318.82	
Track mileage pro-rate of Property Investment to State of Washington			$59,116,494.72
Total Book Value Rd. and Eq. December 31st, 1918:			
*Tacoma Eastern	$4,848,662.11		
*P. S. & W. H	3,288,829.60		
*B. & N.	2,210,124.62		
*S. P. A. & W	2,442,603.98		
*Gray's Harbor Line	3,079,037.48		
	$15,869,257.79		

*Included in mileage pro-rate above.

*S. P. A. & W.

Note.—The valuation of this Company's property by the Interstate Commerce Commission is not yet completed; the inventory of physical quantities has been made, but is not yet summarized and a start has not yet been made on the pricing. The company has no reliable information at the present time upon which to state the fair value of the railroad property in the State of Washington.

[fol. 293] C., M. & St. P. Exhibit No. 4-1

Chicago, Milwaukee & St. Paul Railway Company

Statement of all Freight Operating Expense for Year 1919. State of Washington. Requested by Public Service Commission of Washington. Feb. 14, 1921. Maintenance of Way and Structures

Accounts	National Park Branch of Coast Division	Willapa Park or Branch of Coast Division	Olympic Division	Bellingham Division	Balance of State	Total
201. Superintendence	4,132.94	2,333.03	3,950.11	4,729.63	114,003.84	129,149.55
202. Roadway maintenance	19,941.36	7,043.52	9,014.85	15,661.41	260,601.28	312,262.42
206. Tunnels and Subways	.....	[.13]*	.....	.....	3,649.19	3,649.06
210. Bridges, Trestles and Culverts	21,327.18	9,042.73	5,646.36	29,075.22	341,556.74	406,648.23
212. Ties	33,834.76	1,993.26	223.29	15,499.01	181,086.89	232,637.21
214. Rails	1,455.45	37.07	1,959.82	586.18	19,445.65	23,484.17
216. Other Track Material	2,069.76	[163.80]	1,487.48	2,093.38	34,803.88	40,290.70
218. Ballast	547.76	407.67	511.70	3.63	24,671.91	26,142.67
Track Laying and Surfacing	38,225.89	14,132.58	10,907.97	21,311.66	387,983.38	472,561.48

223. Snow and Sand Fences and Snow Sheds	.....	.....	.....	.....	239.02	239.02
225. Crossings and Signs	711.76	482.53	262.95	452.09	9,865.73	11,775.06
227. Station and Office Buildings	4,195.67	349.88	419.23	417.30	56,392.83	61,774.91
229. Roadway Buildings	576.49	247.05	232.98	3.17	10,734.65	11,794.34
231. Water Stations	1,066.76	103.54	312.79	839.77	19,807.10	22,129.96
233. Fuel Stations	535.52	[48.85]	2.08	43.92	3,913.26	4,445.93
235. Shops and Enginehouses	105.97	122.97	136.59	849.84	28,334.54	29,549.91
239. Storage Warehouses	.....	.....	.....	.....	942.50	942.50
241. Wharves and Docks	.....	2.44	.....	91.28	60,168.39	60,262.11
247. Telegraph and Telephone Lines	2,330.60	815.40	751.88	1,861.02	20,274.65	26,033.55
249. Signals and Interlockers	209.75	131.87	15.50	170.99	32,862.08	33,390.19
253. Power Plant Buildings	.....	.....	.....	.....	454.69	454.69
255. Power Substation Buildings	.....	.....	.....	.....	110.70	110.70
257. Power Transmission Systems	.....	.....	.....	.....	385.31	385.31
259. Power Distribution Systems	.....	.08	4.86	34.38	3,552.26	3,591.58
261. Power Line Poles and Fixtures	.....	.....	.....	.....	64.68	64.68
266. Miscellaneous Structures	.....	.....	.....	.....	10.42	10.42
267. Paving	.....	5.27	.....	.....	5,864.37	5,869.64
269. Roadway Machines	358.53	805.38	544.57	310.53	11,902.17	13,921.18
271. Small Tools and Supplies	1,065.69	828.12	551.43	1,371.09	31,601.00	35,417.33
272. Removing Snow, Ice and Sand	1,775.02	195.25	8.49	561.33	29,454.92	31,995.01
273. Assessment for Public Improvements	.....	.....	.....	3,151.09	2,968.05	6,119.14
274. Injuries to Persons	85.91	9.06	134.85	15.65	21,386.77	21,632.24
275. Insurance	2.02	.....	[8.88]	364.50	[4,764.97]	[4,407.33]
276. Stationery and Printing	36.78	25.55	89.61	72.89	3,780.18	4,005.01
277. Other Expenses	195.98	169.78	.....	.....	3,713.37	4,079.13
278. M. J. T. Y. & O. F.—Dr	2.35	140.35	.....	.70	207,042.60	207,186.00
279. M. J. T. Y. & O. F.—Cr	[1,240.57]	[10.17]	.....	.....	[70,660.73]	[71,911.47]
Total Maintenance of Way and Structures	134,227.98	39,125.69	37,742.02	99,852.54	1,870,072.14	2,181,020.37
Total Maintenance of Way and Structures, less accounts 278 and 279	135,466.20	38,995.51	37,742.02	99,851.84	1,733,690.27	2,045,745.84

*Figures inclosed in brackets are in red ink in copy.

[fol. 295] C., M. & St. P. Ry. Co.—Exhibit VI

Statement showing actual cost of repairing Log Flats at points shown below, April to September, 1919, inclusive.
Compiled under direction of General Manager

Station	Average number of cars in in service per month	Total net cost	Average cost per month all cars	Average cost per month per car	Average cost per day per car	Average loaded car miles per car 6 months period	Average cost per loaded car mile 6-months period
Tacoma	458	$77,203.53	$12,867.25	$28.09	$.936	870	$.1937
Everett	518	9,895.80	1,649.30	3.18	.106	516	.0369
Cedar Falls	153	3,926.93	654.49	4.28	.142	762	.0336
Spirit Lake	25	12,266.28	2,044.38	81.77	2.72	2,658	.1844
St. Maries	309	31,927.79	5,321.30	17.22	.574	868	.1189
Raymond	151	9,986.06	1,664.34	11.02	.367	402	.1645
Bellingham	204	14,328.32	2,388.05	11.70	.390	786	.0894
Port Angeles	166	16,927.85	2,821.31	17.00	.566	1,032	.0989
All Stations	1,984	176,462.56	29,410.43	14.83	.494	761	.1168

Note.—Low average costs at Everett and Cedar Falls is due to the fact that all cars in need of heavy repairs are sent to Tacoma for repairs.

200L. Comparative General Balance Sheet—Liability Side

For instructions covering this schedule, see the text pertaining to General Balance Sheet Accounts in the Uniform System of Accounts for Steam Railway Corporations. The entries in this balance sheet should be consistent with those in the supporting schedules on the pages indicated. The entries in the short column (b_2) should be deducted from those in column (b_1) in order to obtain corresponding entries for column (c). All debit entries hereunder should be in red ink. The making of entries in column (d) is optional.

Line No.	Balance at beginning of year (a) $ c	Item (b)	(b_1) Total book liability at close of year	(b_2) Respondent's holdings included in (b_1)	Schedule No.	Balance at close of year (c) $ c	Net change during year. (Increase in black, decrease in red) (d) $ c
1		Stock					
2							
3	233,251,800.00	(751) Capital stock (p. 224)	350,000,000	116,748,200	251	233,251,800.00	
4	.....	(752) Stock liability for conversion (p. 225)			252	.....	
5	36,183.87	(753) Premium on capital stock				36,183.87	
6	233,287,983.87	Total stock				233,287,983.87	
7		Governmental Grants:					
8	8,589.54	(754) Grants in aid of construction				18,368.54	
9		Long-Term Debt:	(b_1) Total book liability at close of year	(b_2) Respondent's holdings included in (b_1)			
10							
11	379,255,254.66	(755) Funded debt unmatured (p. 226)*	529,562,654.66	119,800,566.81	261M	409,762,087.85	
12	.....	(756) Receiver's certificates (p. 229)			262	.....	
13	.....	(757) Nonnegotiable debt to affiliated companies					
14	.....	(A) Notes (p. 230)			263	.....	
15	.....	(B) Open accounts (p. 230)			263	.....	
16	379,255,254.66	Total long-term debt				409,762,087.85	
17		Current Liabilities:					
18	15,500,000.00	(758) Loans and bills payable (p. 235)			271	1,000,000.00	
19	7,883.33	(759) Traffic and car-service balances payable				4,090,276.27	
20	241,798.01	(760) Audited accounts and wages payable				21,852,354.60	
21	117,950.25	(761) Miscellaneous accounts payable				1,146,515.28	
22	9,943,878.29	(762) Interest matured unpaid				5,932,793.50	
23	5,799.00	(763) Dividends matured unpaid				4,773.00	
24	24,400.00	(764) Funded debt matured unpaid (p. 235)†			275	41,400.00	
25	.....	(765) Unmatured dividends declared				.....	
26	1,963,650.99	(766) Unmatured interest accrued				2,094,993.99	
27	.....	(767) Unmatured rents accrued				.....	
28	.....	(768) Other current liabilities				.....	
29	27,805,359.87	Total current liabilities				36,163,106.64	
30		Deferred Liabilities:					
	.....	(769) Liability for provident funds				.....	

32	46,780,457.51	(770)	Other deferred liabilities		893,275.52
33	46,780,457.51		Total deferred liabilities		893,275.52
34			Unadjusted Credits:		
35	724,980.63	(771)	Tax liability		3,842,098.54
36	.....	(772)	Premium on funded debt		.....
37	2,859,217.92	(773)	Insurance and casualty reserves		2,973,629.30
38	.....	(774)	Operating reserves (p. 235)	284	.....
39	.....	(775)	Accrued depreciation—Road (p. 238)	285	.....
40	15,267,693.65	(776)	Accrued depreciation—Equipment (p. 238)	285	17,863,662.62
41	.....	(777)	Accrued depreciation—Miscellaneous physical property (p. 238)	285	.....
42	1,089,723.29	(778)	Other unadjusted credits (p. 235)	286	2,353,133.13
43	19,941,615.49		Total unadjusted credits		27,032,523.59
44			Corporate Surplus:		
45	167,599.78	(779)	Additions to property through income and surplus		322,573.15
46	351,000.00	(780)	Funded debt retired through income and surplus		372,000.00
47	272,441.80	(781)	Sinking fund reserves		1,250.00
48	.....	(782)	Miscellaneous fund reserves		.....
49	.....	(783)	Appropriated surplus not specifically invested		.....
50	791,041.58		Total appropriated surplus		695,823.15
51	42,380,342.89	(784)	Profit and loss‡ Credit balance		38,376,166.95
52	43,171,384.47		Total corporate surplus§		39,071,990.10
53	750,250,645.41		Grand Total		746,229,336.11

*Includes $2,192,600.00 of notes maturing not more than two years after the date thereof.
†Excludes no matured funded debt held by or for respondent and not canceled.
‡Insert "Debit" or "Credit," as may be appropriate.
§Deficit if in red.

[fol. 366] Freight Traffic Movement (Company Material Excluded) During Year Ended December 31st, 1920

State of Washington

Commodities	Rev. frt. originating on respondent's road, whole tons	Rev. frt. received from connecting carriers, whole tons	Total revenue freight, whole tons	Per cent of whole
Products of Agriculture:				
Wheat	60,349	4,930	65,279	1.1
Corn	1,199	144	1,343	...
Oats	3,304	700	4,004	.1
Other grain	2,947	100	3,047	.1
Flour and meal	29,577	1,013	30,590	.5
Other Mill products	18,555	506	19,061	.3
Hay, Straw, and Alfalfa	41,643	3,316	44,959	.7
Tobacco	225	13	238	...
Cotton	.....	.....	.....	...
Cotton seed and products, except oil	51	.....	51	...
Citrus fruits	67	70	137	...
Other fresh fruits	14,382	5,785	20,167	.3
Potatoes	1,577	303	1,880	.1
Other fresh vegetables	10,244	1,178	11,422	.2
Dried fruits and vegetables	1,409	254	1,663	.1
Other products of agriculture	16,418	1,372	17,790	.3
Total	201,947	19,684	221,631	3.8
Products of Animals:				
Horses and mules	521	77	598	...
Cattle and calves	3,579	2,016	5,595	.1
Sheep and goats	3,497	179	3,676	.1
Hogs	167	.....	167	...
Fresh meats	2,577	37	2,614	.1
Other packing-house products	781	.....	781	...
Poultry	4,856	322	5,178	.1
Eggs	1,908	13	1,921	...
Butter and cheese	205	23	228	...
Wool	172	.....	172	...
Hides and leather	868	42	910	...
Other products of animals	7,462	302	7,764	.1
Total	26,593	3,011	29,604	.5
Products of Mines:				
Anthracite coal	1,931	57	1,988	...
Bituminous coal	52,432	34,387	86,819	1.5
Coke	28	1,610	1,638	...
Iron Ore	61	.....	61	...
Other ores and concentrates	248	60	308	...
Base bullion and matte	47	.....	47	...
Clay, gravel, sand and stone	124,004	2,424	126,428	2.2
Crude petroleum	80	.....	80	...
Asphaltum	20	.....	20	...
Salt	462	283	745	...
Other products of mines	2,964	503	3,467	.1
Total	182,277	39,324	221,601	3.8
Products of Forests:				
Logs, posts, poles and cord wood	3,190,307	3,103	3,193,410	55.4
Ties	23,222	6,493	29,715	.5
Pulpwood	6,201	.....	6,201	.1
Lumber, timber, box shocks staves and headings	1,188,943	174,005	1,362,948	23.6
Other products of forest	8,172	146	8,318	.1
Total	4,416,845	183,747	4,600,592	79.7
[fol. 367] Manufactures and Miscellaneous:				
Refined petroleum and its products	86,179	7,530	93,709	2.3
Vegetable oils	2,586	964	3,550	.1
Sugar, sirup, glucose, and molasses	959	828	1,787	...
Boats and vessel supplies	194	173	367	...
Iron, pig and bloom	247	35	282	...
Balls and fastenings	1,847	209	2,056	...
Bar and sheet iron, structural iron and iron pipe	1,646	313	1,959	...
Other metals, pig, bar and sheet	4,255	226	4,481	.1
Castings, machinery, and boilers	8,543	2,387	10,930	.2
Cement	51,413	4,968	56,381	1.0
Brick and artificial stone	20,004	1,607	21,611	.4
Lime and plaster	15,561	258	15,819	.3
Sewer pipe and drain tile	5,157	64	5,221	.1
Agricultural implements and vehicles other than automobiles	3,652	90	3,742	.1
Automobiles and autotrucks	981	130	1,111	...
Household goods and secondhand furniture	1,008	177	1,185	...
Furniture (new)	6,249	232	6,481	.1
Beverages	385	74	459	...
Ice	68	.....	68	...
Fertilizers (all kinds)	295	46	341	...
Paper, printed matter, and books	.....	152	152	...
Chemicals and explosives	2,959	925	3,884	.1
Textiles	1,055	96	1,151	...
Canned goods (all canned food products)	26,360	1,938	28,298	.5
Other manufactures and miscellaneous	120,837	9,424	130,261	3.4
Total	362,440	32,846	395,286	8.7
Grand Total, Carload Traffic	5,190,102	278,612	5,468,714	96.5
Merchandise—All L. C. L. Freight	194,777	4,905	199,682	3.5
Grand Total, Carload and L. C. L. Traffic	5,384,879	283,517	5,668,396	100.0

SCHEDULE "C"—Table IV.—RECAPITULATION OF STEAM RAILROADS—VALUATION BY COUNTIES.

NAME OF ROADS BY COUNTIES	Assessed ratio to actual value (Pct.)	Actual value	Equalized value
ADAMS	40.00		
Chicago, Milwaukee & St. Paul Railway		$7,160,628	$2,864,251
Northern Pacific Railway		6,551,066	2,620,426
Oregon-Washington Railroad & Navigation Company		4,006,316	1,602,526
Pullman Company (Equipment only)		39,777	15,911
Spokane, Portland & Seattle Railway		4,164,944	1,665,978
Totals		$21,922,731	$8,769,092
ASOTIN	38.00		
BENTON	40.00		
Chicago, Milwaukee & St. Paul Railway		$482,632	$193,053
Northern Pacific Railway		4,891,214	1,956,486
Oregon-Washington Railroad & Navigation Company		1,794,087	717,635
Pullman Company (Equipment only)		22,340	8,936
Spokane, Portland & Seattle Railway		6,286,039	2,514,416
Totals		$13,476,312	$5,390,526
CHELAN	45.00		
Great Northern Railway		$8,775,134	$3,948,810
Pullman Company (Equipment only)		2,441	1,098
Totals		$8,777,575	$3,949,908
CLALLAM	44.00		
Chicago, Milwaukee & St. Paul Railway		$1,080,605	$475,467
Totals		$1,080,605	$475,467
CLARKE	34.00		
Great Northern Railway		$203,387	$69,152
Northern Pacific Railway		3,147,341	1,070,096
Oregon-Washington Railroad & Navigation Company		122,868	41,776
Pullman Company (Equipment only)		30,666	10,426
Spokane, Portland & Seattle Railway		2,565,530	872,280
Totals		$6,069,792	$2,063,730
COLUMBIA	33.00		
Northern Pacific Railway		$303,049	$100,006
Oregon-Washington Railroad & Navigation Company		3,365,768	1,110,704
Pullman Company (Equipment only)		241	80
Totals		$3,669,058	$1,210,790
COWLITZ	43.00		
Great Northern Railway		$460,451	$197,994
Northern Pacific Railway		5,239,610	2,253,033
Oregon-Washington Railroad & Navigation Company		255,043	109,669
Pullman Company (Equipment only)		59,691	25,667
Totals		$6,014,795	$2,586,363

Schedule "C"—Table IV.—Continued.

NAME OF ROADS BY COUNTIES	Assessed ratio to actual value (Pct.)	Actual value	Equalized value
9. DOUGLAS	38.00		
Great Northern Railway		$3,365,264	$1,278,800
Pullman Company (Equipment only)		573	218
Waterville Railway		35,000	13,300
Totals		$3,400,837	$1,292,318
10. FERRY	42.00		
Great Northern Railway		$2,074,497	$871,289
Spokane & British Columbia Railway		152,320	63,974
Totals		$2,226,817	$935,263
11. FRANKLIN	40.00		
Northern Pacific Railway		$6,399,136	$2,559,654
Oregon-Washington Railroad & Navigation Company		1,408,043	563,217
Pullman Company (Equipment only)		25,252	10,101
Spokane, Portland & Seattle Railway		5,685,645	2,274,258
Totals		$13,518,076	$5,407,230
12. GARFIELD	32.00		
Oregon-Washington Railroad & Navigation Company		$586,549	$187,696
Totals		$586,549	$187,696
13. GRANT	35.00		
Chicago, Milwaukee & St. Paul Railway		$3,681,276	$1,288,447
Great Northern Railway		6,009,427	2,103,299
Northern Pacific Railway		2,622,546	917,891
Pullman Company (Equipment only)		2,158	755
Totals		$12,315,407	$4,310,392
14. GRAYS HARBOR	41.00		
Chicago, Milwaukee & St. Paul Railway		$199,230	$81,686
Northern Pacific Railway		3,564,485	1,461,439
Oregon-Washington Railroad & Navigation Company		2,100,184	861,076
Pullman Company (Equipment only)		11,786	4,832
Totals		$5,875,685	$2,409,033
15. ISLAND	46.00		
16. JEFFERSON	42.00		
Chicago, Milwaukee & St. Paul Railway		$193,506	$81,273
Port Townsend & Puget Sound Railway Company		314,566	132,118
Totals		$508,072	$213,391
17. KING	47.00		
Chicago, Milwaukee & St. Paul Railway		$6,875,480	$3,231,475
Great Northern Railway		6,241,098	2,933,316
Northern Pacific Railway		17,569,841	8,257,825
Oregon-Washington Railroad & Navigation Company		1,659,030	779,745
Pacific Coast Railway		3,100,000	1,457,000
Pullman Company (Equipment only)		70,931	33,338
Totals		$35,516,380	$16,692,699

Schedule "C"—Table IV.—Continued.

NAME OF ROADS BY COUNTIES	Assessed ratio to actual value (Pct.)	Actual value	Equalized value
13. KITSAP	44.00		
Chicago, Milwaukee & St. Paul Railway		$64,301	$28,293
Totals		$64,301	$28,293
19. KITTITAS	41.00		
Chicago, Milwaukee & St. Paul Railway		$8,050,638	$3,300,762
Northern Pacific Railway		8,780,104	3,599,843
Pullman Company (Equipment only)		38,963	15,975
Totals		$16,869,705	$6,916,580
20. KLICKITAT	38.00		
Oregon Trunk Railway		$125,450	$47,671
Pullman Company (Equipment only)		17,063	6,484
Spokane, Portland & Seattle Railway		10,179,225	3,868,106
Totals		$10,321,738	$3,922,261
21. LEWIS	36.00		
Chicago, Milwaukee & St. Paul Railway		$1,070,920	$385,531
Cowlitz, Chehalis & Cascade Railway		169,125	60,885
Great Northern Railway		369,139	132,890
Newaukum Valley Railroad		92,297	33,227
Northern Pacific Railway		5,570,821	2,005,496
Oregon-Washington Railroad & Navigation Company		474,294	170,746
Pullman Company (Equipment only)		43,046	15,497
Totals		$7,789,642	$2,804,272
22. LINCOLN	38.00		
Chicago, Milwaukee & St. Paul Railway		$64,775	$24,614
Great Northern Railway		6,585,592	2,502,522
Northern Pacific Railway		4,573,012	1,737,747
Oregon-Washington Railroad & Navigation Company		642,007	243,963
Pullman Company (Equipment only)		9,344	3,551
Spokane, Portland & Seattle Railway		197,623	75,097
Totals		$12,072,353	$4,587,497
23. MASON	41.00		
Blakely Railroad		$78,175	$32,052
Northern Pacific Railway		24,481	10,037
Peninsular Railway		295,790	121,274
Totals		$398,446	$163,363
24. OKANOGAN	41.00		
Great Northern Railway		$3,970,821	$1,628,037
Totals		$3,970,821	$1,628,037
25. PACIFIC	41.00		
Chicago, Milwaukee & St. Paul Railway		$509,614	$208,943
Northern Pacific Railway		1,120,326	459,334
Oregon-Washington Railroad & Navigation Company		772,440	316,700
Totals		$2,402,380	$984,977

Schedule "C"—Table IV.—Continued.

NAME OF ROADS BY COUNTIES	Assessed ratio to actual value (Pct.)	Actual value	Equalized value
26. PEND OREILLE	40.00		
Chicago, Milwaukee & St. Paul Railway		$2,122,734	$849,093
Great Northern Railway		1,517,286	606,914
Pullman Company (Equipment only)		577	231
Totals		$3,640,596	$1,456,238
27. PIERCE	43.00		
Chicago, Milwaukee & St. Paul Railway		$4,379,318	$1,882,107
Great Northern Railway		478,122	205,592
Northern Pacific Railway		10,608,657	4,560,722
Oregon-Washington Railroad & Navigation Company		647,245	278,315
Pullman Company (Equipment only)		56,633	24,352
Totals		$16,164,975	$6,950,989
28. SAN JUAN	39.00		
29. SKAGIT	35.00		
Great Northern Railway		$4,426,652	$1,549,328
Northern Pacific Railway		3,113,638	1,089,773
Puget Sound & Baker River Railway		165,000	57,750
Totals		$7,705,290	$2,696,851
30. SKAMANIA	40.00		
Pullman Company (Equipment only)		$10,864	$4,346
Spokane, Portland & Seattle Railway		4,000,354	1,600,142
Totals		$4,011,218	$1,604,488
31. SNOHOMISH	41.00		
Chicago, Milwaukee & St. Paul Railway		$738,514	$302,791
Great Northern Railway		10,476,344	4,295,301
Marysville & Arlington Railway		135,685	55,610
Northern Pacific Railway		7,319,113	3,000,837
Pullman Company (Equipment only)		2,020	828
Washington Western Railway		91,815	37,644
Totals		$18,763,441	$7,693,011
32. SPOKANE	40.00		
Chicago, Milwaukee & St. Paul Railway		$2,030,980	$812,391
Great Northern Railway		7,713,687	3,085,475
Northern Pacific Railway		8,451,060	3,380,424
Oregon-Washington Railroad & Navigation Company		6,531,976	2,612,790
Pullman Company (Equipment only)		34,704	13,882
Spokane International Railway		500,000	200,000
Spokane, Portland & Seattle Railway		3,372,232	1,348,893
Totals		$28,634,639	$11,453,855
33. STEVENS	38.00		
Great Northern Railway		$4,263,373	$1,620,082
Totals		$4,263,373	$1,620,082

Schedule "C"—Table IV.—Concluded.

NAME OF ROADS BY COUNTIES	Assessed ratio to actual value (Pct.)	Actual value	Equalized value
24. THURSTON	39.00		
Chicago, Milwaukee & St. Paul Railway	.....	$1,272,250	$496,178
Great Northern Railway	.....	240,014	93,605
Northern Pacific Railway	.....	5,592,779	2,181,183
Oregon-Washington Railroad & Navigation Company	.....	782,837	305,307
Pullman Company (Equipment only)	.....	41,396	16,144
Totals	.....	$7,929,275	$3,092,417
25. WAHKIAKUM	40.00		
26. WALLA WALLA	39.00		
Northern Pacific Railway	.....	$4,283,898	$1,670,718
Oregon-Washington Railroad & Navigation Company	.....	10,116,737	3,945,535
Pullman Company (Equipment only)	.....	32,639	12,729
Totals	.....	$14,433,280	$5,628,982
27. WHATCOM	40.00		
Chicago, Milwaukee & St. Paul Railway	.....	$1,389,518	$555,808
Great Northern Railway	.....	3,318,968	1,327,587
Northern Pacific Railway	.....	3,743,448	1,497,380
Totals	.....	$8,451,934	$3,380,775
28. WHITMAN	37.00		
Chicago, Milwaukee & St. Paul Railway	.....	$5,105,408	$1,889,001
Northern Pacific Railway	.....	3,740,974	1,384,160
Oregon-Washington Railroad & Navigation Company	.....	13,791,579	5,102,885
Pullman Company (Equipment only)	.....	5,850	2,165
Spokane, Portland & Seattle Railway	.....	896,230	331,605
Washington, Idaho & Montana Railway	.....	110,708	40,961
Totals	.....	$23,650,750	$8,750,780
29. YAKIMA	44.00		
Chicago, Milwaukee & St. Paul Railway	.....	$168,461	$74,122
Northern Pacific Railway	.....	9,250,107	4,070,047
Oregon-Washington Railroad & Navigation Company	.....	1,717,477	755,690
Pullman Company (Equipment only)	.....	18,455	8,120
Totals	.....	$11,154,500	$4,907,980
GRAND TOTALS	.....	$337,651,263	$120,165,576

200L. Comparative General Balance Sheet—Liability Side

For instructions covering this schedule, see the text pertaining to General Balance Sheet Accounts in the Uniform System of Accounts for Steam Railway Corporations. The entries in this balance sheet should be consistent with those in the supporting schedules on the pages indicated. The entries in the short column (b_2) should be deducted from those in column (b_1) in order to obtain corresponding entries for column (c). All debit entries hereunder should be in red ink. The making of entries in column (d) is optional.

Balance at beginning of year (a) $ c.		Item (b)	(b_1) Total book liability at close of year	(b_2) Respondent's holdings included in (b_1)	Schedule No.	Balance at close of year (c) $ c.	Net change during year. (Increase in black, decrease in red) (d) $ c.
		Stock:					
249,477,150.00	(751)	Capital stock (p. 224)	249,478,250.00	1,100.00	251	249,477,150.00	—0—
—0—	(752)	Stock liability for conversion (p. 225)	—0—	—0—	252	—0—	—0—
81,268.44	(753)	Premium on capital stock	81,268.44	—0—	...	81,268.44	—0—
249,558,418.44		Total stock				249,558,418.44	—0—
		Governmental Grants:					
104,101.87	(754)	Grants in aid of construction			...	168,355.22	64,253.35
		Long-Term Debt:					
			(b_1) Total book liability at close of year	(b_2) Respondent's holdings included in (b_1)			
270,524,015.16	(755)	Funded debt unmatured (p. 226)*	324,126,909.09	66,520,393.93	261M	257,606,515.16	x12,917,500.00
—0—	(756)	Receiver's certificates (p. 229)	—0—	—0—	262	—0—	—0—
	(757)	Non-negotiable debt to affiliated companies:					
—0—		(A) Notes (p. 230)			263	—0—	—0—
344,926.01		(B) Open accounts (p. 230)			263	324,547.20	x20,378.81
270,868,941.17		Total long-term debt				257,931,062.36	x12,937,878.81
		Current Liabilities:					
1,475,000.00	(758)	Loans and bills payable (p. 235)			271	21,500,000.00	20,025,000.00
1,831.28	(759)	Traffic and car-service balances payable			...	895,918.85	894,087.57
186,225.22	(760)	Audited accounts and wages payable			...	12,282,149.19	12,095,923.97
6,541,737.03	(761)	Miscellaneous accounts payable			...	9,135,878.34	2,594,141.31
4,876,699.53	(762)	Interest matured unpaid			...	4,789,719.81	x86,979.72
8,685.25	(763)	Dividends matured unpaid			...	13,051.50	4,366.25
1,200.00	(764)	Funded debt matured unpaid (p. 235)†			275	15,200.00	14,000.00
—0—	(765)	Unmatured dividends declared			...	—0—	—0—
492,675.31	(766)	Unmatured interest accrued			...	604,150.45	111,475.14
—0—	(767)	Unmatured rents accrued			...	—0—	—0—
—0—	(768)	Other current liabilities			...	654,471.42	654,471.42
13,584,053.62		Total current liabilities				49,890,539.56	36,306,485.94
		Deferred Liabilities:					

—0—	(769)	Liability for provident funds	...	—0—	—0—
65,735,208.60	(770)	Other deferred liabilities	...	82,743,193.46	17,007,984.86
65,735,208.60		Total deferred liabilities		82,743,193.46	17,007,984.86
		Unadjusted Credits:			
1,537,769.63	(771)	Tax liability	...	6,089,866.83	4,552,097.20
—0—	(772)	Premium on funded debt	...	—0—	—0—
1,664,100.68	(773)	Insurance and casualty reserves	...	1,916,181.50	252,080.82
—0—	(774)	Operating reserves (p. 235)	284	674,154.74	674,154.74
1,937,197.38	(775)	Accrued depreciation—Road (p. 238)	285	2,035,624.31	98,426.93
30,099,287.72	(776)	Accrued depreciation—Equipment (p. 238)	285	30,531,604.42	432,316.70
—0—	(777)	Accrued depreciation—Miscellaneous physical property (p. 238)	285	1,422.12	1,422.12
2,223,830.66	(778)	Other unadjusted credits (p. 235)	286	8,228,754.11	6,004,923.45
37,462,186.07		Total unadjusted credits		49,477,608.03	12,015,421.96
		Corporate Surplus:			
37,444,657.05	(779)	Additions to property through income and surplus	...	37,375,079.86	x69,577.19
1,230,446.76	(780)	Funded debt retired through income and surplus	...	1,334,023.64	103,576.88
24,320.51	(781)	Sinking fund reserves	...	12,608.46	x11,712.05
5,385,635.60	(782)	Miscellaneous fund reserves	...	—0—	x5,385,635.00
303,870.57	(783)	Appropriated surplus not specifically invested	...	653,115.10	349,244.53
44,388,929.89		#Total appropriated surplus		39,374,827.06	x5,014,102.83
75,462,133.44	(784)	Profit and loss‡ Credit balance	...	83,375,094.19	7,912,960.75
119,851,063.33		Total corporate surplus§		122,749,921.25	2,898,857.92
757,163,973.10		Grand Total		812,519,098.32	55,355,125.22

* Includes $840,600.00 of notes maturing not more than two years after the date thereof (see line 39-46, page 227).
† Excludes $ none matured funded debt held by or for respondent and not canceled.
x Decrease.
‡ Insert "Debit" or "Credit," as may be appropriate.
§ Deficit, if in red.
# See letter 11/29/21 in front of report.

[fol. 427]

310. Railway Operating Revenues

[For Companies Making Operating Reports]

State the railway operating revenues of the respondent for the year (classified in accordance with the Uniform System of Accounts for Steam Railway Corporations), and the comparison of such revenues with those of the preceding year (showing increases in black and decreases in red) for each of the several classes. The proportion of joint traffic receipts belonging to other carriers should not be included in column (b).

Line No.		Class of Railway Operating Revenues (a)	Total amount of revenue for the year (b)	Comparison with total revenue of preceding year (Increases in black decreases in red) (c)	Revenues earned within the State: On intrastate traffic (d)	Revenues earned within the State: On interstate traffic (e)	Includes Oregon: Total (f)
1	(101)	Freight				*12,926.00	*12,926.00
2	(102)	Passenger			3,631,875.00	6,544,201.20	10,176,076.20
3	(103)	Excess baggage			*11.46	*73,957.85	*73,969.31
4	(104)	Sleeping car			2,868,243.16	2,286,985.91	5,155,229.07
5	(105)	Parlor and chair car				*577.17	*577.17
6	(106)	Mail			22,633.94	18,046.79	40,680.73
7	(107)	Express				*2,138.76	*2,138.76
8	(108)	Other passenger-train			125,237.94	105,193.26	230,431.20
9	(109)	Milk				*2,169.75	*2,169.75
10	(110)	Switching			23,503.73	51,740.93	75,244.66
11	(111)	Special service train				*3,787.30	*3,787.30
12	(112)	Other freight-train				1,023,314.29	1,023,314.29
13	(113)	Water transfers—Freight					*3,966.81
14	(114)	Water transfers—Passenger			Cannot state.		558,252.84
15	(115)	Water transfers—Vehicles and live stock				*58.78	*58.78
16	(116)	Water transfers—Other			2,230.47	1,841.49	4,071.96
17		Total rail-line transportation revenue					*1,003.03
18	(121)	Freight			Cannot state.		162,043.11
19	(122)	Passenger			1,283.27	5,119.84	6,403.11
20	(123)	Excess baggage					
21	(124)	Other passenger service					
22	(125)	Mail					
23	(126)	Express					
24	(127)	Special service					
25	(128)	Other					
26		Total water-line transportation revenue					*100,596.91
27	(131)	Dining and buffet					17,431,747.17
							*5,080.67
					Cannot state.		285,298.05

For figures see page 303.

28	(132)	Hotel and restaurant	For entire li		178,982.53		178,982.53
29	(133)	Station, train, and boat privileges			Cannot state.		507.29
30	(134)	Parcel room			21,389.65		21,389.65
							*266.04
31	(135)	Storage—Freight			Cannot state.		107.61#
							*21.94
32	(136)	Storage—Baggage			" "		15,743.53
							*373.00
33	(137)	Demurrage			" "		54,461.42
34	(138)	Telegraph and telephone			" "		26,517.75
35	(139)	Grain elevator					
36	(140)	Stockyard					
37	(141)	Power					
38	(142)	Rents of buildings and other property			12,437.43		12,437.43
							*1,675.92
39	(143)	Miscellaneous			Cannot state.		372,651.84
							*7,417.57
40		Total incidental operating revenue					967,881.88
							*53.35
41	(151)	Joint facility—Cr.			" "		789.19
42	(152)	Joint facility—Dr.			" "		58.25#
							*53.35
43		Total joint facility operating revenue					730.94
							*108,067.83
44		Total railway operating revenues					18,400,359.99
		Total					18,508,427.82

50. State the rule or rules used by the respondent in assigning revenues from interstate traffic to the several States in which such traffic moves.

*Represents revenues in State of Oregon.
†50 See note attached.
‡Red Fig.

310. Railway Operating Revenues

State the railway operating revenues on respondent's road for the year regardless of changes in form of control (classified in accordance with the Uniform System of Accounts for Steam Railway Corporations), and the comparison of such revenues with those of the preceding year (showing increases in black and decreases in red) for each of the several classes. The proportion of joint traffic receipts belonging to other carriers should not be included in columns (b) and (c)

Line No.	Class of railway operating revenues (a)	Amount of revenue for the year (b)	Comparison with revenue of preceding year. (Increases in black, decreases in red) (c)	Class of railway operating revenues (d)	Amount of revenue for the year (e)	Comparison with revenue of preceding year. (Increases in black, decreases in red) (f)
		$ c	$ c		$ c	$ c
1	(101) Freight	89,760,845.24	12,409,373.17	(131) Dining and buffet	873,464.53	143,472.62
2	(102) Passenger	20,551,025.20	927,166.11	(132) Hotel and restaurant	709,101.03	68,797.70
3	(103) Excess baggage	162,720.95	11,495.14	(133) Station, train, and boat privileges	8,093.37	1,407.71
4	(104) Sleeping car	1,112,882.40	150,039.71	(134) Parcel room	62,135.20	582.00
5	(105) Parlor and chair car	127,816.63	27,725.19	(135) Storage—Freight	570,401.04	*102,864.22
6	(106) Mail	5,477,767.35	3,554,546.45	(136) Storage—Baggage	43,866.35	1,555.13
7	(107) Express	2,998,461.08	645,786.15	(137) Demurrage	323,533.98	44,128.70
8	(108) Other passenger-train	16,562.23	1,043.31	(138) Telegraph and telephone	156,083.23	23,731.70
9	(109) Milk	35.82	*6,968.04	(139) Grain elevator		
10	(110) Switching	766,741.04	72,089.70	(140) Stockyard		
11	(111) Special service train	33,514.47	*9,204.36	(141) Power		
12	(112) Other freight-train	Dr. 327.82	*1,505.27	(142) Rents of buildings and other property	142,553.40	*6,912.31
13	(113) Water transfers—Freight			(143) Miscellaneous	999,242.99	399,971.60
14	(114) Water transfers—Passenger			Total incidental operating revenues	3,888,475.12	573,870.63
15	(115) Water transfers—Vehicles and live stock			(151) Joint facility—Cr	65,328.37	14,962.26
16	(116) Water transfers—Other			(152) Joint facility—Dr	Dr. 63,982.87	*6,293.92
				Total joint facility operating revenue	1,345.50	8,668.34
17	Total rail-line transportation revenue	121,008,044.59	17,781,587.26	Total railway operating revenues	124,897,865.21	18,364,126.23
18	(121) Freight					
19	(122) Passenger					
20	(123) Excess baggage					
21	(124) Other passenger service					
22	(125) Mail					
23	(126) Express					
24	(127) Special service					
25	(128) Other					
26	Total water-line transportation revenue					

*Decrease.

330. Miscellaneous Operations

State the revenues and operating expenses of the respondent resulting from its several miscellaneous operations for the year, the resulting net revenues therefrom, and the comparison of such net revenues with those from the several like operations of the preceding year. Show increases in black and decreases in red. The respondent's investment in properties, the results of whose operations are reported in this schedule, should be shown in schedule No. 212, "Miscellaneous physical property" (p. 207).

Line No.	Class of miscellaneous operations (a)	Amount of revenue for the year (b)	Amount of operating expenses for the year (c)	Net revenue for the year (d)	Comparison with net revenue of preceding year (Increases in black, decreases in red) (e)	Taxes charged to "taxes on on miscellaneous operating property" (f)
		$ c	$ c	$ c	$ c	$ c
1						
2						
3						
4		None				
5						
6						
7						
8	Total					

[fol. 456] 541. Revenue Freight Carried During the Year Within the State of Washington 508-a

Give the particulars called for concerning the commodities carried on the respondent's road during the year, classifying them in accordance with the Commission's Order in the Matter of Freight Commodity Statistics, effective on January 1, 1920, the revenue from which is includible in account No. 101, "Freight." In stating the number of tons received from connecting carriers, include all connecting carriers, whether rail or water, and whether the freight is received directly or indirectly (as through elevators).

Particulars for classes Nos. 1 to 69 should include carload traffic only, all less than carload traffic being included in class No. 70.

Class No.	Commodity (a)	Revenue freight originating on respondent's road within the State		Revenue freight received from connecting carriers within the State		Total revenue freight carried originating within the State		Remarks (h)
		Number of carloads (b)	Number of tons (2,000 lbs.) (c)	Number of carloads (d)	Number of tons (2,000 lbs.) (e)	Number of carloads (f)	Number of tons (2,000 lbs.) (g)	
	Products of Agriculture							
1	Wheat	2,208	87,517					
2	Corn	79	3,128					
3	Oats	546	17,855					
4	Other grain	99	3,341					
5	Flour and meal	1,365	49,011					
6	Other mill products	1,225	35,165					
7	Hay, straw, and alfalfa	2,891	39,775					
8	Tobacco	.....	.....					
9	Cotton	.....	.....					
10	Cotton seed and products, except oil	.....	.....					
11	Citrus fruits	11	187					
12	Other fresh fruits	12,171	224,257	Not Compiled		Not Compiled		
13	Potatoes	554	10,654					
14	Other fresh vegetables	349	5,656					
15	Dried fruits and vegetables	160	3,115					
16	Other products of agriculture	260	6,358					
	Total	21,918	486,019					
	Products of Animals							
17	Horses and mules	108	1,292					
18	Cattle and calves	955	11,887					
19	Sheep and goats	790	8,945					
20	Hogs	102	1,045					
21	Fresh meats	292	3,878					
22	Other packing-house products	136	2,255					
23	Poultry	1	15					
24	Eggs	19	365					
25	Butter and cheese	41	690					
26	Wool	38	791					
27	Hides and leather	75	1,292					
28	Other products of animals	293	8,694					
	Total	2,850	41,149					
	Products of Mines							
29	Anthracite coal	5	148					
30	Bituminous coal	3,291	119,073					
31	Coke	62	1,690					
32	Iron ore	99	870					

33	Other ores and concentrates	803	32,632		
34	Base bullion and matte	331	15,719		
35	Clay, gravel, sand and stone,	5,123	240,310		
36	Crude petroleum	13	445		
37	Asphaltum	8	236		
38	Salt	42	987		
39	Other products of mines	20	401		
	Total	9,720	412,520		
	Products of Forests				
40	Logs, posts, poles, and cordwood	27,877	918,578	29.27	
41	Ties	353	14,024		
42	Pulp wood	68	1,977		
43	Lumber, timber, box shooks, staves, and headings	24,020	663,506		
44	Other products of forests	88	2,304		
	Total	52,406	1,600,389		
	Manufactures and Miscellaneous				
45	Refined petroleum and its products	1,262	47,410		
46	Vegetable oils	293	9,108		
47	Sugar, sirup, glucose, and molasses	60	1,890		
48	Boats and vessel supplies	2	18		
49	Iron, pig and bloom	114	2,904		
50	Rails and fastenings	209	4,075		
51	Bar and sheet iron, structural iron, and iron pipe	277	10,030		
52	Other metals, pig, bar, and sheet	100	4,042		
53	Castings, machinery, and boilers	1,149	28,935		
54	Cement	4,143	159,383		
55	Brick and artificial stone	750	27,951		
56	Lime and plaster	217	6,762		
57	Sewer pipe and drain tile	153	3,260		
58	Agricultural implements and vehicles other than automobiles	107	1,817		
59	Automobiles and autotrucks	714	5,410		
60	Household goods and second hand furniture	465	5,129		
61	Furniture (new)	73	936		
62	Beverages	60	1,199		
63	Ice	54	1,132		
64	Fertilizers (all kinds)	145	3,758		
65	Paper, printed matter, and books	170	4,139		
66	Chemicals and explosives	237	9,856		
67	Textiles	26	651		
68	Canned goods (all canned food products)	1,720	57,495		
69	Other manufactures and miscellaneous	3,633	68,772		
	Total	16,133	466,062		
	Grand Total, Carload Traffic	103,027	3,006,139		
70	Merchandise—All L. C. L. freight	.....	132,646		
	Grand Total, Carload and L. C. L. Traffic	103,027	3,138,785		

Not Compiled

Not Compiled

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FOR

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200L. Comparative General Balance Sheet—Liability Side

For instructions covering this schedule, see the text pertaining to General Balance Sheet Accounts in the Uniform System of Accounts for Steam Railway Corporations. The entries in this balance sheet should be consistent with those in the supporting schedules on the pages indicated. The entries in the short column (b_2) should be deducted from those in column (b_1) in order to obtain corresponding entries for column (c). All debit entries hereunder should be in red ink. The making of entries in column (d) is optional.

Line No.	Balance at beginning of year (a)	Item (b)	(b_1) Total book liability at close of year	(b_2) Respondent's holdings included in (b_1)	Schedule No.	Balance at close of year (c)	Net change during year. (Increase in black, decrease in red) (d)
1	$ c	**Stock**				$ c	$ c
2							
3	50,000,000.00	(751) Capital stock (p. 224)	50,000,000.00	.....	251	50,000,000.00	
4	.....	(752) Stock liability for conversion (p. 225)	.....	.....	252	.....	
5	.....	(753) Premium on capital stock	.....	.....		.....	
6	50,000,000.00	Total stock				50,000,000.00	
7		**Governmental Grants**					
8	31,238.98	(754) Grants in aid of construction				31,232.01	6.97#
9		**Long-Term Debt**					
10							
11	94,990,140.00	(755) Funded debt unmatured (p. 226)*	95,294,215.00	253,000.00	261M	95,041,215.00	51,075.00
12	.....	(756) Receiver's certificates (p. 229)			262	.....	.....
13	.....	(757) Nonnegotiable debt to affiliated companies					
14	.....	(A) Notes (p. 230)			263	.....	.....
15	13,645,710.01	(B) Open accounts (p. 230)			263	17,606,677.99	3,960,967.98
16	108,635,850.01	Total long-term debt				112,647,892.99	4,012,042.98
17		**Current Liabilities**					
18	.....	(758) Loans and bills payable (p. 235)			271	.....	.....
19	.....	(759) Traffic and car-service balances payable				347,213.47	347,213.47
20	26,997.50	(760) Audited accounts and wages payable				3,778,371.40	3,751,373.90
21	1,281,964.20	(761) Miscellaneous accounts payable				1,436,581.97	154,617.77
22	1,563,527.85	(762) Interest matured unpaid				1,480,244.15	83,283.70#
23	.....	(763) Dividends matured unpaid				.....	.....
24	3,000.00	(764) Funded debt matured unpaid (p. 235)†			275	3,000.00	.....
25	.....	(765) Unmatured dividends declared				.....	.....
26	77,933.33	(766) Unmatured interest accrued				77,933.33	.....
27	.....	(767) Unmatured rents accrued				251,808.17	251,808.17
28	21,522.55	(678) Other current liabilities				162,511.43	140,988.88
29	2,974,945.43	Total current liabilities				7,537,663.92	4,562,718.49
30		**Deferred Liabilities**					
31	.....	(769) Liability for provident funds				.....	.....
32	13,043,740.04	(770) Other deferred liabilities				15,458,510.90	2,414,770.86
33	13,043,740.04	Total deferred liabilities				15,458,510.90	2,414,770.86

34			**Unadjusted Credits**			
35	148,050.10	(771)	Tax liability		1,834,337.78	1,686,287.68
36	.....	(772)	Premium on funded debt		.....	.....
37	172,149.09	(773)	Insurance and casualty reserves		127,378.49	44,770.60#
38	.....	(774)	Operating reserves (p. 235)	284	.....	.....
39	120,554.83	(775)	Accrued depreciation—Road (p. 238)	285	135,358.42	14,803.59
40	4,668,668.28	(776)	Accrued depreciation—Equipment (p. 238)	285	6,162,674.42	1,494,006.14
41	.....	(777)	Accrued depreciation—Miscellaneous physical property (p. 238)	285	.....	.....
42	198,156.88	(778)	Other unadjusted credits (p. 235)	286	1,139,254.37	941,097.49
43	5,307,579.18		Total unadjusted credits		9,399,003.48	4,091,424.30
44			**Corporate Surplus**			
45	2,143,314.64	(779)	Additions to property through income and surplus		2,156,821.25	13,506.61
46	.....	(780)	Funded debt retired through income and surplus		.....	.....
47	.....	(781)	Sinking fund reserves		.....	.....
48	.....	(782)	Miscellaneous fund reserves		.....	.....
49	.....	(783)	Appropriated surplus not specifically invested		.....	.....
50	2,143,314.64		Total appropriated surplus		2,156,821.25	13,506.61
51	2,845,830.86	(784)	Profit and Loss‡ Debit balance		779,666.57#	3,625,497.43#
52	4,989,145.50		Total corporate surplus§		1,377,154.68	3,611,990.82#
53	184,982,499.14		Grand Total		196,451,457.98	11,468,958.84

*Includes $ None of notes maturing not more than two years after the date thereof.
†Excludes $ None matured funded debt held by or for respondent and not canceled.
‡Insert "Debit" or "Credit," as may be appropriate.
§Deficit, if in red.
#Red Fig.

310. Railway Operating Revenues

(For companies making operating reports)

State the railway operating revenues of the respondent for the year (classified in accordance with the Uniform System of Accounts for Steam Railway Corporations), and the comparison of such revenues with those of the preceding year (showing increases in black and decreases in red) for each of the several classes. The proportion of joint traffic receipts belonging to other carriers should not be included in column (b).

Line No.	Class of railway operating revenues	Total amount of revenue for the year	Comparison with total revenue of preceding year. (Increases in black. decreases in red)	Revenues earned within the State		
				On intrastate traffic	On interstate traffic	Total
	(a)	(b)	(c)	(d)	(e)	(f)
1	(101) Freight	22,021,762.27	2,669,432.27	1,363,869.50	4,862,839.80	6,226,709.30
2	(102) Passenger	7,706,770.62	964,062.69	865,304.94	2,003,876.23	2,869,181.17
3	(103) Excess baggage	77,972.38	9,480.27	8,183.24	21,941.86	30,125.10
4	(104) Sleeping car	.....	.....	.....	.....	.....
5	(105) Parlor and chair car	23,988.92	2,874.82	2,038.46	20,716.38	22,754.84
6	(106) Mail	901,343.33	560,571.22	.....	220,193.18	220,193.18
7	(107) Express	822,252.80	149,181.28	.....	400,888.61	400,888.61
8	(108) Other passenger-train	82,896.34	65,508.26	9,040.33	21,320.82	30,361.15
9	(109) Milk	.....	.....	.....	.....	.....
10	(110) Switching	318,383.78	2,681.97	158,368.57	.....	158,368.57
11	(111) Special service train	16,477.51	11,487.14#	2,987.45	3,783.61	6,771.06
12	(112) Other freight-train	230.56	33.56	225.56	.....	225.56
13	(113) Water transfers—Freight	.....	.....	.....	.....	.....
14	(114) Water transfers—Passenger	550.93	14.68	.....	.....	.....
15	(115) Water transfers—Vehicles and live stock	.....	.....	.....	.....	.....
16	(116) Water transfers—Other	.....	.....	.....	.....	.....
17	Total rail-line transportation revenue	31,972,629.44	4,412,353.88	2,410,018.05	7,555,560.49	9,965,578.54
18	(121) Freight	124,079.89	62,679.42	24,381.15	33,203.99	57,585.14
19	(122) Passenger	39,409.84	11,465.40	237.13	13,773.58	14,010.71
20	(123) Excess baggage	183.39	5.39#	11.10	58.70	69.80
21	(124) Other passenger service	525.98	198.02	.....	231.41	231.41
22	(125) Mail	641.81	510.52	.....	320.90	320.90
23	(126) Express	2,431.00	504.57	.....	.....	.....
24	(127) Special service	.....	.....	.....	.....	.....
25	(128) Other	25.00	25.00	.....	.....	.....
26	Total water-line transportation revenue	167,296.91	75,377.54	24,629.38	47,588.58	72,217.96
27	(131) Dining and buffet	259,046.57	43,737.69	.....	77,713.97	77,713.97
28	(132) Hotel and restaurant	44,685.75	17,742.09	.....	.....	.....
29	(133) Station, train, and boat privileges	17,486.99	1,537.74	10,927.65	.....	10,927.65
30	(134) Parcel room	2,949.87	745.01	1,670.97	.....	1,670.97
31	(135) Storage—Freight	43,388.27	10,904.48#	18,959.62	.....	18,959.62
32	(136) Storage—Baggage	12,974.28	3,019.27	8,758.22	.....	8,758.22
33	(137) Demurrage	70,932.00	15,491.23#	36,531.50	.....	36,531.50
34	(138) Telegraph and telephone	2,540.06	812.42	1,443.91	.....	1,443.91
35	(139) Grain elevator	.....	.....	.....	.....	.....

36	(140)	Stockyard	.....	.....	.....	.....	.....
37	(141)	Power	.....	.....	.....	.....	.....
38	(142)	Rents of buildings and other property	25,935.82	4,554.92	17,071.98	.....	17,071.98
39	(143)	Miscellaneous	294,398.48	10,600.00	54,019.67	1,238.24	55,257.91
40		Total incidental operating revenue	774,338.09	56,353.43	149,383.52	78,952.21	228,335.73
41	(151)	Joint facility—Cr.	44,336.35	9,008.70	5,286.35	2,479.01	7,765.36
42	(152)	Joint facility—Dr.	46,594.54	8,690.46	13,665.21	.....	13,665.21
43		Total joint facility operating revenue	2,258.19#	318.24	8,378.86#	2,479.01	5,899.85#
44		Total railway operating revenues	32,912,006.25	4,544,403.09	2,575,652.09	7,684,580.29	10,260,232.38

50. State the rule or rules used by the respondent in assigning revenues from interstate traffic to the several States in which such traffic moves.

Rules governing accounting and apportionment of Operating Revenues and Operating Expenses and accounts of Movement of Traffic within the state effective February 1, 1915.

#Red Fig.

Give the particulars called for concerning the commodities carried on the respondent's road during the year, classifying them in accordance with the Commission's Order In the Matter of Freight Commodity Statistics, effective on January 1, 1920, the revenue from which is includible in account No. 101, "Freight." In stating the number of tons received from connecting carriers, include all connecting carriers, whether rail or water, and whether the freight is received directly or indirectly (as through elevators).

Particulars for Classes Nos. 1 to 69 should include carload traffic only, all less than carload traffic being included in Class No. 70.

Mileage: ——.

Average number of miles or road operated: ——.

Line No.	Commodity	Revenue freight originating on respondent's road		Revenue freight received from connecting carriers		Total revenue freight carried	
		Number of carloads	Number of tons (2,000 lbs.)	Number of carloads	Number of tons (2,000 lbs.)	Number of carloads	Number of tons (2,000 lbs.)
	Products of Agriculture.						
1	Wheat	8,004	325,707	.....	.....	8,004	325,707
2	Corn	21	630	.....	.....	21	630
3	Oats	211	6,797	.....	.....	211	6,797
4	Other grain	341	11,772	.....	.....	341	11,772
5	Flour and meal	1,028	37,662	.....	.....	1,028	37,662
6	Other mill products	387	11,050	.....	.....	387	11,050
7	Hay, straw, and alfalfa	2,130	30,586	.....	.....	2,130	30,586
8	Tobacco	.....	.....	.....	.....	.....	.....
9	Cotton	2	33	.....	.....	2	33
10	Cotton seed and products, except oil	.....	.....	.....	.....	.....	.....
11	Citrus fruits	.....	.....	.....	.....	.....	.....
12	Other fresh fruits	5,008	89,591	.....	.....	5,008	89,591
13	Potatoes	317	5,961	.....	.....	317	5,961
14	Other fresh vegetables	723	10,441	.....	.....	723	10,441
15	Dried fruits and vegetables	211	6,293	.....	.....	211	6,293
16	Other products of agriculture	272	8,253	.....	.....	272	8,253
	Total	18,655	544,776	.....	.....	18,655	544,776
	Products of Animals.						
17	Horses and mules	138	1,466	.....	.....	138	1,466
18	Cattle and calves	698	8,565	.....	.....	698	8,565
19	Sheep and goats	233	2,332	.....	.....	233	2,332
20	Hogs	110	1,052	.....	.....	110	1,052
21	Fresh meats	17	225	.....	.....	17	225
22	Other packing-house products	21	414	.....	.....	21	414
23	Poultry	1	19	.....	.....	1	19
24	Eggs	19	242	.....	.....	19	242
25	Butter and cheese	14	228	.....	.....	14	228
26	Wool	37	644	.....	.....	37	644
27	Hides and leather	24	625	.....	.....	24	625
28	Other products of animals	110	2,226	.....	.....	110	2,226
	Total	1,422	18,038	.....	.....	.....	18,038
	Products of Mines.						
29	Anthracite coal	.....	.....	.....	.....	.....	.....
30	Bituminous coal	764	37,063	.....	.....	764	37,063
31	Coke	4	117	.....	.....	4	117
32	Iron ore	1	38	.....	.....	4	38
33	Other ores and concentrates	151	6,110	.....	.....	151	6,110
34	Base bullion and matte	93	3,195	.....	.....	93	3,195
35	Clay, gravel, sand, and stone	1,825	95,751	.....	.....	1,825	95,751
36	Crude petroleum	24	829	.....	.....	24	829
37	Asphaltum	1	20	.....	.....	1	20
38	Salt	2	15	.....	.....	2	15
39	Other products of mines	8	205	.....	.....	8	205
	Total	2,873	143,343	.....	.....	2,873	143,343
	Products of Forests.						
40	Logs, posts, poles, and cord wood	17,270	697,508	.....	.....	17,270	697,508
41	Ties	1,952	88,347	.....	.....	1,952	88,347
42	Pulp wood	12	502	.....	.....	12	502
43	Lumber, timber, box shooks, staves, and headings	18,078	598,476	.....	.....	18,078	598,476
44	Other products of forests	213	4,820	.....	.....	213	4,820
	Total	37,525	1,389,653	.....	.....	37,525	1,389,653
	Manufactures and Miscellaneous.						
45	Refined petroleum and its products	57	1,791	.....	.....	57	1,791
46	Vegetable oils	42	1,406	.....	.....	42	1,406
47	Sugar, sirup, glucose, and molasses	57	2,158	.....	.....	57	2,158
48	Boats and vessel supplies	21	477	.....	.....	21	477
49	Iron, pig and bloom	15	652	.....	.....	15	652
50	Rails and fastenings	101	3,591	.....	.....	101	3,591
51	Bar and sheet iron, structural iron, and iron pipe	248	7,778	.....	.....	248	7,778
52	Other metals, pig, bar, and sheet	17	477	.....	.....	17	477
53	Castings, machinery, and boilers	375	7,437	.....	.....	375	7,437
54	Cement	73	2,176	.....	.....	73	2,176
55	Brick and artificial stone	556	22,210	.....	.....	556	22,210
56	Lime and plaster	120	2,712	.....	.....	120	2,712
57	Sewer pipe and drain tile	514	11,029	.....	.....	514	11,029
58	Agricultural implements and vehicles other than automobiles	273	3,065	.....	.....	273	3,0 5
59	Automobiles and autotrucks	360	2,708	.....	.....	360	2,708
60	Household goods and secondhand furniture	287	2,760	.....	.....	287	2,760
61	Furniture (new)	142	2,092	.....	.....	142	2,092
62	Beverages	110	2,705	.....	.....	110	2,705
63	Ice	293	7,660	.....	.....	293	7,660
64	Fertilizers (all kinds)	119	3,612	.....	.....	119	3,612
65	Paper, printed matter, and books	43	955	.....	.....	43	955
66	Chemicals and explosives	91	1,341	.....	.....	91	1,341
67	Textiles	3	29	.....	.....	3	29
68	Canned goods (all canned food products)	816	26,662	.....	.....	816	26,662
69	Other manufactures and miscellaneous	2,508	54,773	.....	.....	2,508	54,773
	Total	7,241	172,256	.....	.....	7,241	172,256
	Grand Total, Carload Traffic	.....	.....	.....	.....	.....	.....
70	Merchandise—All L. C. L. freight	.....	78,722	.....	.....	.....	78,722
	Grand Total, Carload, and L. C. L. Traffic	67,716	2,346,788	.....	.....	67,716	2,346,788

[fol. 512] 541. Revenue Freight Carried During the Year.† 508

Give the particulars called for concerning the commodities carried on the respondent's road during the year, classifying them in accordance with the Commission's Order In the Matter of Freight Commodity Statistics, effective on January 1, 1920, the revenue from which is includible in account No. 101, "Freight." In stating the number of tons received from connecting carriers, include all connecting carriers, whether rail or water, and whether the freight is received directly or indirectly (as through elevators).

Particulars for classes Nos. 1 to 69 should include carload traffic only, all less than carload traffic being included in class No. 70.

Class No.	Commodity (a)	Revenue freight originating on respondent's road		Revenue freight received from connecting carriers		Total revenue freight carried		Remarks (h)
		Number of carloads (b)	Number of tons (2,000 lbs.) (c)	Number of carloads (d)	Number of tons (2,000 lbs.) (e)	Number of carloads (f)	Number of tons (2,000 lbs.) (g)	
	Products of Agriculture.							
1	Wheat	15,175	622,209	1,848	75,058	17,023	697,267	
2	Corn	63	1,930	662	25,108	725	27,038	
3	Oats	583	18,597	479	16,231	1,062	34,828	
4	Other grain	628	22,008	210	7,280	838	29,288	
5	Flour and meal	3,065	116,391	788	29,448	3,853	145,839	
6	Other mill products	1,449	43,050	238	5,202	1,687	48,252	
7	Hay, straw, and alfalfa	4,239	59,830	793	10,573	5,032	70,403	
8	Tobacco	.....	.....	12	270	12	270	
9	Cotton	8	135	2,443	41,389	2,451	41,524	
10	Cotton seed and products, except oil	5	120	7	159	12	279	
11	Citrus fruits	2	29	965	17,200	967	17,229	
12	Other fresh fruits	7,304	131,505	3,510	62,081	10,814	193,586	
13	Potatoes	477	9,053	610	10,402	1,087	19,455	
14	Other fresh vegetables	897	12,814	1,355	19,044	2,252	31,858	
15	Dried fruits and vegetables	277	7,855	330	9,450	607	17,305	
16	Other products of agriculture	393	11,414	1,142	26,124	1,535	37,538	
	Total	34,565	1,056,940	15,392	355,019	49,957	1,411,959	
	Products of Animals.							
17	Horses and mules	467	5,082	132	1,558	599	6,640	
18	Cattle and calves	3,803	47,786	3,067	38,420	6,870	86,206	
19	Sheep and goats	2,930	31,473	973	10,262	3,903	41,734	
20	Hogs	650	6,104	1,356	12,518	2,006	18,622	
21	Fresh meats	184	2,812	160	2,618	344	5,430	
22	Other packing-house products	40	874	155	3,134	195	4,008	
23	Poultry	2	33	11	155	13	188	
24	Eggs	74	874	60	1,169	134	2,043	
25	Butter and cheese	33	556	84	1,328	117	1,884	
26	Wool	362	5,918	163	2,406	525	8,324	
27	Hides and leather	66	1,511	134	1,928	200	3,439	
28	Other products of animals	225	4,109	326	9,063	551	13,172	
	Total	8,836	107,131	6,621	84,559	15,457	191,690	
	Products of Mines.							
29	Anthracite coal	.....	.....	9	210	9	210	
30	Bituminous coal	816	38,659	19,869	872,452	20,685	911,111	
31	Coke	6	168	762	22,182	768	22,350	
32	Iron ore	1	38	29	1,340	30	1,378	
33	Other ores and concentrates	8,836	419,404	830	32,989	9,666	452,393	
34	Non-metallic minerals, except fuels	96	3,285	253	10,950	349	14,235	

35	Clay, gravel, sand, and stone	4,028	210,262	1,224	63,296	5,252	273,560
36	Crude petroleum	283	9,590	11	47	294	10,061
37	Asphaltum	76	2,357	228	7,6	304	10,016
38	Salt	13	229	957	30,5	970	30,743
39	Other products of mines	12	960	398	15,9	430	16,921
	Total	14,187	684,952	24,570	1,058,026	38,757	1,742,978
	Products of Forests.						
40	Logs, posts, poles, and cordwood	26,738	1,024,055	2,710	83,519	29,448	1,107,574
41	Ties	2,682	121,706	1,676	68,544	4,358	190,250
42	Pulp wood	24	1,039	92	3,290	116	4,329
43	Lumber, timber, box shooks, staves, and headings	37,694	1,184,559	17,014	603,030	54,708	1,787,589
44	Other products of forests	242	5,456	280	7,846	522	13,302
	Total	67,380	2,336,815	21,772	766,229	89,152	3,103,044
	Manufactures and Miscellaneous.						
45	Refined petroleum and its products	571	15,208	1,963	54,350	2,534	69,558
46	Vegetable oils	71	2,372	1,501	47,736	1,572	50,108
47	Sugar, sirup, glucose, and molasses	94	3,072	633	18,812	727	21,884
48	Boats and vessel supplies	27	678	20	289	47	967
49	Iron, pig and bloom	45	1,799	102	4,795	147	6,594
50	Rails and fastenings	195	6,844	317	15,122	512	21,966
51	Bar and sheet iron, structural iron, and iron pipe	450	12,849	2,106	88,074	2,556	100,923
52	Other metals, pig, bar, and sheet	1,018	41,201	305	9,310	1,323	50,511
53	Castings, machinery, and boilers	699	13,247	1,115	22,754	1,814	36,001
54	Cement	205	6,018	915	34,928	1,120	40,946
55	Brick and artificial stone	650	25,320	289	10,527	939	35,847
56	Lime and plaster	300	7,283	582	21,341	882	28,624
57	Sewer pipe and drain tile	617	12,900	33	796	650	13,696
58	Agricultural implements and vehicles other than automobiles	452	5,016	1,186	17,476	1,638	22,492
59	Automobiles and autotrucks	589	4,769	5,578	42,484	6,167	47,253
60	Household goods and secondhand furniture	580	5,706	524	5,423	1,104	11,129
61	Furniture (new)	302	3,856	524	6,152	826	10,008
62	Beverages	322	7,359	199	4,042	521	11,401
63	Ice	607	15,670	30	756	637	16,426
64	Fertilizers (all kinds)	193	5,893	47	1,577	240	7,470
65	Paper, printed matter, and books	53	1,135	1,225	32,880	1,278	34,015
66	Chemicals and explosives	103	1,632	214	5,365	317	6,997
67	Textiles	3	29	57	1,091	60	1,120
68	Canned goods (all canned food products)	1,304	41,798	1,082	33,530	2,386	75,328
69	Other manufactures and miscellaneous	5,486	112,229	6,623	159,776	12,109	272,005
	Total	14,936	353,883	27,170	639,386	42,106	993,269
	Grand Total, Carload Traffic	139,904	4,539,721	95,525	2,903,219	235,429	7,442,940
70	Merchandise—All L. C. L. freight	.....	206,853	.....	70,934	.....	277,787
	Grand Total, Carload and L. C. L. Traffic	139,904	4,746,574	95,525	2,974,153	235,429	7,720,727

†Not required from switching and terminal companies.

[fol. 9] O. O. CALDERHEAD, a witness produced on behalf of the Commission, after being first duly sworn, testified as follows:

Direct examination:

Mr. Clifford:

Q. Your name is O. O. Calderhead?
A. Yes sir.
Q. And you are the Traffic Expert of the Department of Public Works, of the State of Washington?
A. Yes.
[fol. 10] Q. I will ask you if you have made an investigation of the log rates in effect in the State of Washington in preparation for this hearing?
A. I have.
Q. Have you embodied that investigation in an exhibit?
A. Yes.
Q. Is this writing that I hand you such exhibit?
A. Yes.
Q. We ask that this be marked for identification Commission's Exhibit "A" and offer it in evidence herein.

(Exhibit so marked.)

The Director: I would like to have any person, except those who are here merely as spectators, that is all who are parties to the controversy if you have not already filled out one of these cards with your name and address etc. kindly step up and get one and fill it out.

Mr. Clifford:

Q. Now I ask you to refer to the writing just introduced in evidence and ask you to state from what the figures contained therein were compiled?
A. That is a statement showing the present commodity and distance rates and minimums on logs in carloads and in trainloads in effect at the present time, and those in effect prior to August 26, 1920, on the lines of the Northern Pacific, Great Northern, Chicago, Milwaukee & St. Paul, and the Oregon-Washington Railroad & Navigation Company, together with mileages between points where specific rates are provided. Also showing rates and minimums in Idaho and Oregon on the same roads in interstate rates between points in Washington and points in Idaho and Oregon, together with [fol. 11] a loose leaf showing the average commodity log rate in the State of Washington on the four lines, segregated as between east of the Cascade Mountains and west of the Cascade Mountains, and showing average commodity rates, not distance tables, but commodity rates of all the lines of all the roads. There is also contained in this exhibit a chart showing rates per thousand feet on the perpendicular scale and the mileage on the horizontal scale. The first graphic shows the Northern Pacific, and that includes both east

of the mountains and west of the mountains, and is made for the purpose of showing the discrepancies and differences between rates for similar distances upon the same line of road and upon different lines of road. The last chart indicates the combined of the four railroads. Taking the sheet "E" it will be noticed that on the combined railroads there are rates in single car lots for distances between 6 to 10 miles of less than $1.00, while for distances between 1 to 5 miles there are rates of $2.00. This same discrepancy applies all the way through. That practically covers the exhibit for the reason that everything else in the exhibit is explained and the tariff references given and the points between which the shipments move are shown.

Q. And these figures were obtained from the tariffs of the carriers involved, on file in your office?

A. Yes sir.

Q. Which are the files of the Department of Public Works of the State of Washington?

A. Yes sir.

Q. Is there any further com-ent that you wish to make on the exhibit?

A. I think not, everything is given in the exhibit in explanation [fol. 12] of any of the figures that might be asked.

Cross-examination.

Mr. Dudley:

Q. Calling your attention to the item No. 170 on page 6, Snohomish to Everett, 7 miles, $1.95½, that is a commodity rate?

A. Yes sir.

Q. Is there not a distance tariff that reduces that to $1.56½?

A. Not that I know of.

Q. Then turn to the next page, page 7, item No. 100, Reliance to Tacoma, you give the figures there $2.43½, isn't that reversal of figures—isn't that or should not that be $2.34½—that is a typographical error?

A. That is possibly an error; that might be true.

Q. I would say in checking it up here, we find that to be the case, it should be $2.34½ instead of $2.43½; the figures are transposed?

A. Yes, it could be easily figured by increasing by 25% the $1.87½ and that would be $2.34½ that is correct.

Q. So that that should be corrected to read $2.34½?

A. Yes; you will find the same figures on the other pages showing the transposition of those figures.

The Director: Are there any other questions of Mr. Calderhead?

Mr. Hunt: I would like to point out one or two errors on page 10; Item 160, Hanna to Cosmopolis, distance shown as 5 miles, should be 8 miles. The next item 160, Hanna to Aberdeen shown as 7 miles should be 11 miles—exact miles 10.8 miles.

A. How about Hanna to Hoquiam, 160?

Q. Item 160 again, Hanna to Preachers Slough, shown as 9 miles, should be 10 miles. The next item 160, Hanna to Hoquiam, [fol. 13] should be 14 miles. The next item is 187, Aberdeen to Primo, distance shown as 14 miles should be 16 miles.

A. Is that due to the short line mileage of your distance tariff?

Q. I am just giving you the actual mileages now.

A. Are those your short line mileages?

Q. No there is only one route there.

A. Any competition?

Q. No, there is no competitive route there at all; there is only one road and the mileage I am giving you is the actual mileage Mr. Calderhead. And the train load rates the first item, Primo to Cosmopolis, shown as 11 miles should be 13. On the same page, page 10 item 185, the first item under heading of train load rates. The second item under that, or the last item on the page, Primo to Aberdeen shown as 14 miles should be 16 miles. On the next page, page 11 Primo to Hoquiam, third item, should be 19 miles instead of 17 miles. That is all.

A. I will have to check those mileages, but I am quite certain that we took it from your distance tables.

Q. That is where I took these. I took them and checked them over three times to be sure.

A. It is possible there is an error there of a mile or two, but I cannot understand how I got it wrong.

Mr. Clifford: In the cases in which you have pointed out an error in the distances is it your contention that there is a corresponding difference in the rates?

Mr. Mount: No, the rates are all right it is the distance. It would increase the mileages and possibly throw out some of those rates shown in Mr. Calderhead's compilation in this statement in this exhibit.

A. It would only throw them out where it occurred either with a nought or a 5, but I would say very few of them would do that.

[fol. 14] Mr. Mount: Yes there would be only a few of them?

The Director: Any other questions of Mr. Calderhead?

Mr. Henderson: Referring to the loose leaf, west and east of the Cascades combined, that shows the average rates—per thousand feet —of the combined east and west tariffs, does it?

A. Yes sir, those are the commodity rates, not distance rates.

Q. Now referring to page "E" of the exhibit, will you be able to get the average rate shown on the loose leaf from exhibit "E"?

A. No, we would not for the reason that exhibit "E" covers both distance tariff and commodity rates.

Q. Another question with reference to page 2, item 125, Oso to Everett 42 miles, will you check that and see whether that is not 28 miles?

A. I am quite certain that is not, but I will check it.

Mr. Irving: This is probably taken through by way of Snohomish, the logs are not hauled that way however.

A. And the 42 miles are through Shohomish. That would be correct. They would go through Delta and over the Great Northern cut off there.

Mr. Dudley: Is this a separate exhibit?

A. No, it goes right in with the original exhibit "A."

Mr. Clifford: Now from your examination of the log rate in the state and your preparation of this exhibit would you say, that the log rates shown are logically constructed and consistent, or the opposite?

A. I would say that the rates are not consistent for similar distances. The tariffs themselves plainly indicate this without any suspicion of them.

Mr. Carey: Can you ascertain from your exhibit what the average log haul is on the four lines?

[fols. 15-192] A. The average length of the haul?

Q. Yes.

A. That was one of the items which we requested of the carriers, and it has not been supplied to the Commission at this time.

Q. I think that is a very important matter.

A. Our inquiry to the carriers to supply us with certain information of that kind included not the average distances but the actual distances.

Q. From all that you can compute the average length of haul on each of the four lines of railroad?

A. Yes sir.

The Director: The representatives of the Northern Pacific may proceed with their testimony.

Mr. Clifford: That is all Mr. Calderhead.

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[fol. 193] Mr. Dudley: I assume, Mr. Chairman that at this hearing the evidence introduced by anyone of the railroad companies is available for all, that it will be the purpose of the hearing to establish standard rates?

The Director: I think it can be assumed that that applies.

Mr. Dudley: With that assumption I think that this testimony will be all that we care to introduce except the exhibits which I have reserved the right to offer later.

Mr. Henderson: I don't take that to mean that the cost figures and revenue figures of one railroad would be indicative of what might be on another railroad. For instance we are not willing to agree that the figures presented by the Milwaukee would be applicable at all to the Great Northern or the Northern Pacific. I don't believe the Commission can receive them in that way and say that they are available by the other three carriers as representatives of their operations.

[fol. 194] Mr. Balmer: I don't think that was the intent of Mr. Dudley, but in a case of this kind there is always certain evidence that is general in its application. Now there would not be any argu-

ment between us as to which was which. The figures introduced with references to the Milwaukee's operations manifestly don't tend to prove anything in connection with the operations of the Northern Pacific, but in so far as the testimony offered in evidence by the carriers is general we want it to apply to all of the carriers and not only in the case of the witness who is on the stand.

Mr. Carey: I have no objection to the suggestion of Mr. Balmer that in so far as the testimony may be applicable to all of the carriers it may be considered as applying to all of them. But that necessarily involves a ruling by the Commission which is generally applicable and which is not, but I don't want to stipulate that a conclusion which is applicable to the Milwaukee is necessarily applicable to the other three carriers.

Mr. Dudley: I will say that the testimony I had in mind was this, there is, of course, a presumption that rates which have been voluntarily installed by carriers and maintained are reasonable. The testimony which we have introduced as far as our rates are concerned would probably tend to show that they are reasonable, but for the purpose of that presumption evidence will be introduced here to show the way in which this rate system prevailing in the State of Washington has grown up. Now that testimony will be introduced by representatives of some of the other carriers who have been in the field longer than the Milwaukee, and we want the benefit of that testimony. Also some of the other carriers have prepared comparative [fol. 195] tables and statements showing the rates charged in other states as compared to the Washington rates. Now we want the benefit of that testimony. In other words we wouldn't want to call a witness here and have him put in his tariff rates in Minnesota, Montana and other states, and then the moment we close with him the Northern Pacific be compelled to take him up and introduce the same sheets. They should be introduced for all the parties. All the general testimony should be applicable to all. There is no sense in repeating it, and I would be obliged to repeat it under any other rule. As I understand the purpose of this hearing it is to furnish the Commission with the information upon which they will formulate rates governing the transportation of logs, and I presume they will make those rates as far as practical, uniform. Now those rates probably will apply to some of the smaller carriers as well as the larger carriers.

Mr. Carey: Is it your suggestion that in any event the four transcontinental carriers be uniformly classed——

Mr. Dudley: You mean the same rules should apply to them?

Mr. Carey: Yes.

Mr. Dudley: Well it would depend entirely upon the order made by the Commission. Now the Commission may find that some one of these four carriers has some special line that necessitates a special rate—that is a question I cannot answer. Speaking generally the four larger carriers are working together. Take for example the Tacoma-Eastern Railroad where we have very heavy grades, the actual cost of operation might be greater on some line, and as to that detail they might ask for higher rates. Yet I assume that the

Commission's order will probably establish a rate on the Tacoma-Eastern which will probably be the identical rate which they will [fol. 196–874] establish for the Bellingham Road and the Everett Branch, and also for the Northern Pacific, unless they have some special branches which will require special consideration. For instance the Oregon Commission held that where a road was built purely for logging and the timber was removed and the value of the road was gone they held in that case that the rates should properly cover the amortization of that log road. That situation would not of course apply to most of our lines. On most of the lines we expect to be doing a general businss after the logs are removed, but there may — special lines on which that might happen.

Mr. da Ponte: We are offering this testimony now on behalf of the Northern Pacific and counsel is at liberty to contend that it is applicable or inapplicable as they see fit. Of course we have the right to make the same contention; the question of its applicability is for the future to show. There is a lot of it we would have to repeat and we don't want to.

The Director: Of course any figures as to profits or losses in operation on one line would not necessarily be true as to another line.

Mr. Dudley: But the weight of it and its applicability is entirely a matter for the Commission to determine.

Mr. Henderson: We agree with that, that is the reason I didn't want the rule announced at the testimony offered by one carrier should be considered for the other.

Mr. da Ponte: There was no talk of deciding the case yet——

* * * * * * *

[fols. 875-1013] Mr. Robbins: On behalf of the O.-W. R. R. & N. Co., in view of our smaller amount of logging operations, being only about 115,000 cars, as compared with much larger movements on the Northern Pacific and similar large movements on the other roads, we have concluded that it will not be necessary for us to duplicate the general statistical information that has been introduced by the other carriers, and so far a*w* we are concerned, we wish to adopt that testimony, in so far as it is applicable, if there is no objection to that. We desire to put on two additional witnesses and they will be offered here.

Mr. Henderson: May we get a statement of what that proposal is? Are they adopting the proposed scale?

Mr. Robbins: Yes, sir.

Mr. Da Ponte: Whatever scale is prescribed for the roads may be prescribed for the O. W. R. R. & N. Co.

J. W. MOUNT, a witness produced on behalf of the O. W. R. R. & N. Co., being first duly sworn, testified as follows:

Examined by Mr. Robbins:

Q. You are the General Freight Agent of the O. W. R. R. & N Co.?

A. Yes, sir.

Q. I wish you would explain in a general way how conditions on the O. W. R. R. & N. Co. with reference to log traffic compares with conditions on the other roads in the State of Washington.

A. The same conditions that have been testified to by the witnesses for other carriers obtained generally on the O. W. R. R. & N. Company.

Q. As I understand it, the O. W. R. R. & N. would be satisfied with adjustment on rates made in connection with the other roads?

A. We will have to be in a general way. The operations of

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[fol. 1014] PAUL WEBB, being first duly sworn, testified as follows:

Examined by Mr. Henderson:

Q. What is your occupation?

A. Public Accountant.

Q. Particularly for whom?

A. For the Loggers' Information Association.

Q. I wish you would explain how you audit the accounts of the members of that Information Bureau.

A. We started this work in the spring of 1918 for the purpose of standardizing the methods of logging cost accounting. The method that we use is just as follows: For instance we sent out a letter to all members asking them to transmit their costs direct to me. That was in July, for the first half of this year. After those costs were received in my office I took them and came direct to the camp. I go over the books and audit them in detail so I know they are absolutely correct and in accordance with the books of various operators. Then I prepared my consolidated statement, which is built up for the purpose of showing the average cost to produce a thousand feet of logs, and also the profit resulting from the operations of the period.

Q. How many logging camps have you audited?

A. This last statement, nineteen camps.

Q. Have you the result of your audit of those nineteen camps?

A. I have.

Q. Will you state briefly the results of your audit of those camps with reference to such data as you have for operating expenses and carrying it out to profit?

Mr. Balmer: What is the purpose of the question?

Mr. Henderson: To produce figures to show what the results of

[fol. 1015] logging operations are from a financial standpoint, looking to enlightening the Department and the carriers as to perhaps what the traffic will bear, in view of the fact that Mr. Capron of the Northern Pacific stated he would like to have the information of the loggers on that point before you submitted a proposed tariff. We purpose to give you that information from the books.

Mr. Balmer: As a matter of law, I think such evidence is incompetent, irrelevant and immaterial in a rate case. If Mr. Capron is asking for that information I do not want to be in the position of objecting.

Mr. Capron: I explained that yesterday. It came about through the request of Mr. Cleland that we submit a schedule of rates not based on what we might figure that we had a right to demand as a matter of law, but a schedule of rates which we might be willing to accept, and assuming that he had in mind that a full compensatory rate would not move the traffic, our only justification for accepting less than that would be to establish a rate that the traffic would bear, and I thought before making a guess on that we ought to have some idea as to what the traffic would bear.

The Director: Proceed with the testimony.

Mr. Dudley: The Milwaukee joins in that objection.

The Director: The objection is overruled.

Witness: The result of the statement covering a period of the first half of this year, for nineteen logging operations is as follows: Total feet handled, 174,917,565 feet, log scale——

Q. What period?

A. January 1, 1921, to June 30. The net loss resulted, or com-[fol. 1016] bined net loss is $93,500.44, which reflects an average loss per thousand feet of logs of 53.4 cents.

Q. Have you any other figures with reference to any other period?

A. Yes, sir. This work commenced in the spring of 1918. I have figures from that date to the present date.

Q. Have you figures showing the difference between the logger who operates by use of a common carrier and those who do not?

A. Yes, sir.

Q. Will you give those with reference to the first half of 1921, and we will have those figures altogether.

A. Of those nineteen camps, twelve are using the common carrier railroads and—I only had seventeen, and five of them are transporting logs over their own railroads entirely. The result of the operations transporting their logs over common carriers is an average loss per thousand feet, of 92.6 cents. The result of the same period, of the five operations transporting their logs over their own railroads entirely, reflects an average profit per thousand feet of 26.6¢.

Q. In order that we may get what you have included in your figures to show the operating cost, I will ask you if you have included interest on investment?

A. No, sir, not a dollar.

Q. What do your operating costs include, then?

A. They include in the main every dollar that is expended for labor, materials and supplies, plus depreciation on equipment, and depreciation on railroad main lines.

By Mr. Balmer: What rates on both?

A. And interest on borrowed money, and interest on bonded indebtedness and taxes on timber and personal property.

Q. You may proceed and give the figures with reference to the [fol. 1017] other years you was about to give?

A. The year 1918 we had seventeen camps. It showed an average net profit per thousand feet of logs of 61.9 cents. It also shows an earning of interest on invested capital of 3.44%. The year 1919——

Mr. Dudley: Will you segregate 1918 between common carriers and those who operated themselves?

A. I have not got them. The year 1919, with sixteen camps, shows an average net profit per thousand feet of logs of $2.29.4, which is interest on invested capital of 10.88%. The year 1920, seventeen operations, reflects an average net profit per thousand feet of logs of $2.64½ which reflects interest on invested capital of 8.95¢. Now the combined statements for those three years reflects an average net profit per thousand feet of logs of $1.78, and an earning of interest on invested capital of 7.98 per cent.

Q. Do those figures for 1918 and 1919 include camps operating without the use of common carriers?

A. Yes, sir.

Q. And include them for this year?

A. Yes, sir.

Q. I believe you stated you had not made segregation for this year?

A. No, I have not attempted that.

Q. Could you give the names of the camps that you audit?

A. Yes, sir.

Q. Will you just give the names of the camps?

[fol. 1018] A. Lowman Timber Company, Sulton Railway & Timber Company, Cherry Valley Logging Company, Chinn Timber Company, Snow Creek Logging Company, Webb Logging & Timber Company, Sound Timber Company, Samish Bay Logging Company, McCush Logging Company, Wallace Falls Timber Company, Ebey Logging Company, Stevens-Bird Logging & Timber Company, Northwest Lumber Company.

Q. English?

A. We did have that one time, but one time only. McCoy Logging Company, West Fork Logging Company, Lake Riley Lumber Company, Merrill & Lang Logging Company, McLadden & Brown (?), S. W. Barker, Trustee, North Bend Company.

Q. With reference to these various camps, I will ask you what your system is of keeping these accounts with reference to indentifying the particular camp. To make myself clear, I will ask if your statement is so arranged that your camp reports are made by number so that the various loggers themselves will not know what particular camp the report is made upon?

Q. Well, when I entered into this work there was one thing that was made very plain and that was that any information that was submitted to me was strictly confidential; now the method that I use in order to keep it strictly confidential is as follows: As I said before, all operators send in to my office their reports, which are audited at their camps by myself personally, later. I take the name on that report; I generally cut the name off with a scissors or a knife, and on the slip I cut off I place a number, and I place that in my desk. When the report is finally completed and ready [fol. 1019] for distribution I put back into that, which is built up in book form, I put back that cost submitted to me and send it to the operator who contributed the information. In that way there is very little opportunity for the information of one operator to leak out to some other operator.

Q. With reference to verifying any of these accounts, would it be possible for you to direct the auditors of the Commission so that they could, if they desire, verify the correctness of your estimates?

A. These figures can be verified in complete detail. They are in exact accordance with the books of accounts kept by the various operators. I am not in position to say that No. 2 or 3 reports a certain camp, but if the operator is willing to have his books examined, and I can see no reason why he should not be willing to do so, I can direct anybody who wishes to make an audit and verify these figures so that he may make a complete detailed verification.

Mr Henderson: I will say to the Department, if they so desire, the various camps are willing that the Department accountants verify these accounts.

Mr. Da Ponte: We would like to have the privilege.

Mr. Henderson: We did not have the privilege. I have never seen the time when carriers allowed accountants of loggers to go in and verify accounts, but on the contrary when we asked for certain information, we were told that they were not obliged to give it and that they would give it only to the Department.

Mr. Da Pointe: I told you you could get it yourself. We want the privilege of verifying and seeing how some of these accounts are made up. We will select two or three of the companies named whose accounts we would like to see and examine, and see how they got these losses they claim. We do not believe a proper book-keeping [fol. 1020] system—in other words we do not think this will stand as a matter of proper book-keeping and accounting, and for that reason we desire an opportunity to check up with some of our auditors.

Mr. Henderson: If the carriers will provide an auditor in good faith to go along with the auditor of the Commission——

Mr. Da Ponte: Yes, sir.

Mr. Henderson: And when that information is checked over it is not handed over to some other logger, they can go along.

Mr. Da Ponte: It may want to go into the record.

Mr. Henderson: If they find anything wrong they may bring it out.

Mr. Da Ponte: Will the Commission designate a man, and we will have one of our men.

The Director: We do not know at this time whom we can designate.

Mr. Henderson: We will put on some of the loggers and they will have the system of accounting here, so they can examine it without — to any place else for it.

Mr. Da Pointe: We want to see how these accounts are made. We are not questioning anybody's good faith, but we want to see on what basis the loss is reached.

A. I would state that at the commencement of this work I formulated a uniform system of accounting; this uniform system of accounting was something new to the industry, and everybody could see the benefit to be derived; it was submitted to the Federal Trade Commission in Washington for their approval; in other words, set a correct system to use, in order that the information you will finally arrive at is correct and reveals the situation.

Mr. Henderson: Can you submit to the carriers the system of accounting?

[fol. 1921] A. Yes, sir: it is in standard form.

Q. We withdraw the offer of having an auditor go into the offices and inspect, because we expect them to pick the statement—this witness is on the stand, swearing these are the figures.

Mr. Da Ponte: We are not withdrawing our request to examine the books, and it is well known that the law makes the carriers' accounts public, and anyone is welcome to see them. We are not withdrawing our request to see the accounts, unless we find the official information from other sources.

Mr. Henderson: We withdraw consent to their going in, but we do not withdraw consent to the Commission.

The Director: We do not have any power to authorize carriers to produce books.

Mr. Da Ponte: We can ask for a subpœna and bring theme here.

Mr. Henderson: Then we will subpœna your books.

Mr. Da Ponte: I do not see why you desire to prevent scrutiny. There is nothing confidential; our books are all kept and filed by law, with the Department in annual reports.

Mr. Henderson: Only your conclusions.

Mr. Da Ponte: It is a criminal offence to do any changing.

Mr. Henderson: So it is with a corporation.

Mr. Da Ponte: They can keep accounts as they see fit, but we have to show; the law prescribes exactly what the carriers' books have to show, and it is different from any other books. There is no comparison between accounts of common carriers and a private concern.

Supervisor Cleland: I am interested to know what provision makes carriers' books public.

Mr. Da Ponte: The law of this state says you have access to all our books at any time you want.

[fol. 1022] Mr. Henderson: You object to us.

Supervisor Cleland: That is to the Commission, not to the public.

Mr. Da Ponte: You have that power, and the Department represents the public.

Mr. Henderson: We are giving you the same power with reference to our books.

Mr. Da Ponte: We will either get to see the books, or put you on record as refusing to show them, with all the inferences that law imposes.

Mr. Henderson: The Commission has the same access to our books they have to yours. We are producing figures for your information, but not the books.

Mr. Da Ponte: We will select numbers, several of whom have made claim of loss from these operations, and we want to see how that is reached. We have been here four or five days trying to show how we reached our losses.

Mr. Henderson: You have not any books.

Mr. Da Ponte: You say you have looked at books and they made a loss or profit.

Mr. Henderson: That is what your witnesses say.

Mr. Da Ponte: We want to show how it is done.

Mr. Henderson: I would like to know how you do it. We have not been able to find out.

Mr. Da Ponte: If you will give us the cost of repairing, and coal for donkeys, and skids, everything that goes into the cost of your timber——

Mr. Henderson: If the Department will make a request of us to furnish figures, we will bring everything in here for you, and our accountants will take the stand to testify about the correctness of [fol. 1023] their figures, and if there is any further testimony called for, we will produce it off the books.

Mr. Da Ponte: If we ask for certain figures, will you produce them?

Mr. Henderson: If the Commission asks for it, we will produce it.

The Director: That is what you told us at the last hearing.

Mr. Da Ponte: The Commission has no interest in this in a financial way. The Commission is the tribunal. We are the ones.

Mr. Henderson: I supposed the Commission wanted it.

Mr. Da Ponte: We want it too. We want to present our case. If we do not present it, nobody will.

Mr. Henderson: I am much obliged, as far as it goes.

The Director: Proceed with the testimony.

Q. If the Commission request it, will you produce your system of accounting?

A. Yes, sir.

Mr. Da Ponte: Have you got it with you?

A. No, I have not. It is very easy to understand. It is standard form, standard books, standard payrolls.

Q. During Federal control, were those accounts kept and supervised by the Federal Government under the period of Federal control?

A. What do you mean?

Q. The accounting of the loggers, during the period of the war, was it supervised?

A. It was accepted in 1919 by the Federal Trade Commission.

Mr. Da Ponte: I have the report of the Federal Trade Commission.

Q. Have you any figures there showing the actual transportation cost of those camps?

A. Yes, sir.

Q. I wish you would give the Commission the benefit of those figures.

[fol. 1024] By Supervisor Spinning: How long have you been auditor of those books?

A. Not all of them, but since the spring of 1918 I have gathered this information ever since.

Supervisor Spinning: From whom do you receive compensation?

A. From the Loggers' union association of Seattle.

Supervisor Spinning: The companies whose books you have examined—they compensate you—the companies you have named?

A. Not directly; indirectly, through the association.

Supervisor Spinning: What is the object of the association having this union?

A. It is to further economical logging operations; in other words, when a statement is compiled, I show on that statement what the average cost of labor is for instance; the man picks it up when he gets it, and he says "I am a little over the average of labor, and I have got to look a little further into this," and he begins to go through his operation and tries to pull it down, so he can come as close to the average as it is possible to do.

Supervisor Spinning: You itemize all of those expenses and submit them to the association?

A. In complete detail. The reports are all built up along the same line, clear from the start, so that the comparison is simple.

Q. Do you segregate railroad items and donkey engine items?

A. Yes, sir, that is all segregated and analyzed so you can tell pretty nearly anything you want.

Q. You go into the entire work and analyze all these extensive operations?

A. Yes, sir.

[fol. 1025] Q. A record is made of it and retained in the Association?

A. Yes, sir.

Q. They have a report of all of your work?

A. Oh, yes, everything 1918 to date.

Q. Will you proceed to separate the actual transportation charges of these various logging camps?

A. Transportaton cost, you mean? Upon analysis I find that the operations that are transporting their logs over common carrier railroads, their average cost per thousand for the first half of this year was $5.03; that includes of course railroad construction.

Q. I had particular reference in this inquiry to the cost of transportation which the logging camp pays to the common carrier.

A. I have averaged that out and find for thirteen camps it was $1.93.4 per thousand feet.

Q. Have you various camps here, showing what their rate would be and what they actually paid the transportation companies?

A. No, I have not that. I have what they actually paid, but not the rate.

Q. Until you did know what particular camp you are referring to, you would not be able to ascertain that?

A. I do not know.

Q. You testified with reference to the fact that you had audited some twenty one camps. You have a report on some nineteen. I will ask you if whether, and whether it is not a fact, that the other camps were shut down and you did not get their report in there?

A. Yes, sir, I think it was. This report contains nineteen camps only, due to some not having resumed operations since closing down in the fall of 1920.

[fol. 1026] Cross-examination.

By Mr. Da Ponte:

Q. These cost figures you have testified to of course take into consideration the cost of the stumpage?

A. Yes, sir.

Q. Do you know what they charge up for stumpage?

A. The average for stumpage I think during this period was $3.34. I am not sure—but it was between $3.25 and $3.50.

Q. That was the charge which the logger placed against his stumpage and which he had to absorb in his operations?

A. That was the actual cost of the stumpage to the logger.

Q. How do you know it was.

A. Because—in this way. Supposing you got a tract of timber and it cost you half a million dollars, and you found, or the cruise you made showed there was on there 100 million feet, wouldn't that timber cost you $5.00, and as you developed it you carried it at $5.00.

Q. That was the figure the logger used in the reports?

A. Yes, sir.

Q. Where did you get the cost figure?

A. From books of the company.

Q. That was when he bought it, what he paid for it?

A. Some little time ago the Federal Income Tax Department formulated a timber industries questio-naire, and they asked a great many questions on this point, when did you buy this timber, whom did you buy it from, how much did it cost you, and everything that could possibly apply.

Q. With regard to cost, they did not go behind 1914; they fixed a conservative value as of 1914.

A. No, March, 1913.

[fol. 1027] Q. Timber owned prior to that time was given a certain price by the company for income purposes?

A. Yes, sir.

Q. What was that price?

A. Same price I am using here.

Q. The loggers then simply charged stumpage on the basis of the price fixed by the government?

A. Yes, sir.

Q. Regardless of what it actually cost them?

A. You could not check that, as applying generally to this system. It is a fact in some instances, but in the majority of cases we have loggers logging timber on a stumpage basis, that is, as they cut it they paid for it. But other loggers actually went out and bought timber after March 1, 1913. We have their records, that is the men who bought timber. Other men, who bought timber before March 1, 1913,—the charge is going into this report as the same charge which has been submitted to the government for the purpose of Federal taxation.

Q. Have they all adopted this one price?

A. No.

Q. That is the government price for income purposes?

A. Certainly, the government asked them to submit the price in the first place.

Q. Those who owned timber on March 1, 1913, or prior to that time, when they figured up to make their charges of expenses, they used the same price?

A. They charged fair market prices for March 1, 1913.

Mr. Henderson: I object to further cross examination on that ground for the reason it is immaterial, just the same as it would be [fol. 1027a] immaterial for us to show that the Northern Pacific, who received a great bounty from the Federal Government, should not charge that into capital account; we figured capital account as what that timber is valued at, and not what it cost them.

By Mr. Balmer: Have you shown value?

By Mr. Henderson: We have shown where it comes from.

Mr. Da Ponte: They won't let us see their books and expect us to take their reports.

Mr. Henderson: We have offered for this Commission to go and examine them all they want to it is a crime for a corporation to put false entries on books under the State of Washington law.

Mr. Da Ponte: Under that arrangement stumpage which cost the logger say $1 in 1912 is posted up on the books to $3, $4, or $5 in 1913?

A. No, sir.

Q. Do you know that positively?

A. Yes, sir.

Q. You do?

A. Yes, sir.

Q. What does the St. Paul & Tacoma Lumber Company carry on its books?

A. I did not mention it.
Q. What does the Weyerhouser Timber Company——
A. I did not audit them.
Mr. Irving (in the audience): You can answer him.
A. I can not recall, Mr. Irving.
Mr. Irving: My number is 14. You can give him anything.
Q. What does the Weyerhouser Timber Company carry this item at on its books?
A. I can not tell you what the Weyerhouser carries on its books, [fol. 1028] for the simple reason I did not audit their books.
Q. You show 174 million feet.
A. Yes, sir.
Q. The cut in the State was over 5 billion feet?
A. I do not know.
Q. What you represent is an insignificant fraction of the total operations?

Mr. Henderson: About one-fifth.
Mr. Da Ponte: One twenty-fifth.

A. During the period of this war, the figures I gave you were the result of cutting one billion and the figures for the years 1919 and 1920 were the result of cutting one billion and a half.
Mr. Henderson: You have not figures of cut in 1920 and 1921.
Mr. Da Ponte: Merely gross figures for 1920.

Q. When you come to figure your interest and taxes against these, don't you do this—suppose a logger has 100 *miolion* feet of timber and he cuts ten million feet; he charges against the ten million feet the entire cost of carrying the whole hundred million for that year, does he not?
A. In some instances, yes, sir.
Q. The result of that method of doing business is you are making what you cut carry the entire load for that year?
A. These things are in exactly the way the books show——
Q. I want to see what it is.
A. The Federal income tax department says that a logging operator in operation, when he is cutting his timber——

Supervisor Cleland: Let the witness answer his question. I am not going to let you interrupt the witness when he is answering a question.
[fol. 1029] (Question repeated:) Q. The result of that method of doing business is you are making what you cut carry the entire load for that year?

Supervisor Cleland: Let the witness answer.

A. This information or this data is taken from the books of accounts, and the Federal Government stipulates that an operator that is cutting his timber makes the charge,—his taxes on his timber operation, and that his books must be in accord with the income tax return filed.

Q. For the purpose of income taxes?

A. Yes, sir. If they allow it to go as operating expense it is conceivable to me——

Q. It is extremely advantageous to the logger to do it that way, is it not?

A. I do not see it.

Q. It does this——

A. I think it is good business. You would not keep on year after year pushing something ahead of you, knowing you stand in that position. Why not absorb it as you pay it.

Q. Here is what it results in; take the Weyerhouser Timber Company——

Mr. Henderson: We object to going into the Weyerhouser Timber Company.

Supervisor Cleland: Let only one man talk at a time.

Q. I won't use the Weyerhouser now? Suppose you have an owner of timber who owns we will say a billion feet; he cuts five million feet a year; by charging against the five million feet the carrying charges on that billion feet of timber he shows a loss?

A. I do not believe that I have got—I do not think I have one operator who has a billion feet of timber.

[fol. 1030] Q. I never assumed you did.

A. It has no bearing on this report.

Q. I am getting into your method. That is the fact, is it not?

A. Yes, sir, it is a fact, but here is the idea. You may have a tract of timber which you call your operating tract of timber. You own a billion feet, and 500 million feet is here, and 500 million on Hoods Canal. The timber on Hoods Canal, half of what you own, is all taxed, but the timber which makes up the logging operation here is charged in that operation. In other words you figure there is a reasonable amount of timber back of this operation; where a man has two or three billions of timber which can not all be logged at once, he capitalizes the taxes which apply to the timber which he is going to log.

Q. The degree or percentage of loss which each main operation shows depend largely upon the amount of timber which he actually logs as compared with what he actually owns and is carrying? The amount of loss or profit on his operation depends upon the amount of timber he cuts as compared with the amount which he is carrying?

A. Oh, no.

Q. Suppose a man owns a billion feet; he has got fixed charges on that billion feet?

A. Yes, sir.

Q. Suppose his carrying charges are ten thousand dollars. If the only cuts a million feet, on which his profit is one thousand dollars, when he has charged his ten thousand dollars as carrying charges for the billion feet, he shows nine thousand dollars loss.

[fol. 1031] A. If that billion feet is in operation or is adjacent so he can log it by that operation, but in the event of it being removed which it is nine cases out of ten, timber which is remote from present operations, which can not be logged with this railroad, it is customary to let it stand intact until it is opened up.

Q. The amount of his loss depends upon how much timber he is working on?

A. I would not put it that way. We will say a man has got a billion feet of timber, or a half a billion feet; he has got to build a railroad into that tract. He builds a railroad into 500 million; with that operation he has to absorb taxes on the half billion feet. Suppose he has only 200 million feet ready, which will cost him exactly the same, as that road has got to absorb that; that 200 million has got to absorb the proportion on that entire road. If will work one against the other you will find that the man with the 500 million feet charges his taxes against that operation every year.

Q. I am simply getting at the facts.

A. It does not make any material difference. Suppose the logger is logging ordinarily a million feet a year.

Q. Suppose he is logging ordinarily a million feet a year and has a hundred million feet back of him. This logging operation has got to carry the entire body of the timber and all of this expense in connection with this operation?

A. Make it fifty million feet.

Q. If he is taking fifty million, and he has five hundred million, or ten years operation, the profit each year has got to carry that operation, has it not?

[fol. 1032] A. Carry the taxes on that timber.

Q. If he reduces the operation 50% and cuts only 25 million he increases his apparent loss that proportion does he not?

A. Not necessarily.

Q. Why not?

A. If a man can make more money it stands to reason he would make more money if he cuts 50 than 25. He would have more to spread his taxes over.

Q. Suppose he does reduce his operation?

—. People in this state who are loggers are business men.

Q. Didn't you ever hear of a logger reducing his operation?

A. I have heard of a good many loggers and I didn't hear of very many with a million feet of timber on their hands.

Q. The logger does cut more one year than another?

A. That depends on conditions.

Q. Though every time he reduces his output he shows a greater loss on what he produces, because he has his smaller account to which he charges those fixed items of expense?

A. Yes sir, but if a man is working on one side he has not got to absorb a four sided operating cost. He has only one side cost to absorb.

Q. If he reduced his operation he puts out less timber?

A. Yes sir.

Q. He has got a smaller stumpage producing area to charge with the carrying charges of millions of feet he is handling?

A. The carrying charges are quite large.

By Supervisor Spinning: Do you mean by carrying charges, interest and taxes?

[fol. 1033] Q. Yes sir.

By Mr. Henderson: He says he does not do it.

By Mr. Da Ponte: Why don't we get the books?

A. I want to tell you that we charge taxes on the timber because it is the operating unit of operation; we charge interest on its indebtedness, all to operation, and we charge personal property taxes other than timber to operation.

Q. You charge upkeep of equipment to depreciation logging outfit?

A. Yes sir.

Q. The minute you cut your operation cost you increase——

A. You have increased your overhead, certainly.

Q. That includes interest, taxes and depreciation?

A. Sure.

Q. Is it not true that a lot of these loggers you represent, take Mr. Murray of West Valley, what is his capacity, how many feet? 50 million a year is it not?

A. I am not an operator, and I could not walk up to a logging camp and say this has a capacity of 40 million feet a year.

Q. If you don't know you can't say it?

A. I don't.

Q. Do you know how many logs Mr. Murray has gotten out the first six months of this year?

A. I have no information here.

[fol. 1034] Q. Suppose he has gotten out a million then. Suppose he has gotten out this year one-fourth of his capacity which I think we could prove—then he charges against this one fourth the carrying charges on the operation the same as if he had gotten out his full capacity?

A. Correct.

Q. Is Mr. Murray going to be here?

A. I don't know.

By Mr. Henderson: He is in San Francisco.

Q. He is one of the members of this association?

A. Yes sir.

Q. Contributed to the expense of this association?

A. Yes sir.

Q. You spoke of the Federal Trade Commission. You were under the supervision of the Federal Trade Commission?

A. I said no such thing.

Q. What did you say about the supervision of the government?

A. That when this system was formulated and prepared it was submitted to that body.

Q. The Federal Trade Commission?

A. Yes sir.

Q. The Federal Trade Commission made a report on logging business in Western Washington?

A. I am not talking about—it is a uniform system, no figures in it.

[fol. 1035] Q. You sent a copy of the heading of your report?

A. Copies of standardized sheets showing how the costs were arrived at.

Q. You are not giving the impression that the Federal Trade Commission has approved the loggers' accounts in this proceeding?

A. I am not sure about that.

By Supervisor Cleland: He is talking about the classification of accounts, you are talking about amounts.

Q. How does the output for the first six months in 1921 stumpage of logs, compare with the output of six months in 1920?

A. I cannot give you that.

Q. It was vastly larger in 1920?

A. Not of logs. This is merely my idea. The number of feet of logs for the first half of this year was greater than the last half of last year.

Q. Do you know how that compared with the same period of last year?

A. No.

Q. As a matter of fact, logging of 1921 has greatly fallen off over 1920, has it not?

A. I have not got that page here of my figures. We have for 1919 operations though, 175,000,000.

Q. That is only 10 million per camp?

A. We don't claim to average more. In a normal year it is not [fol. 1036] more than 22 to 25 million per year, normal logging camps.

Q. Are your operators putting out as much timber this year as last year?

A. I think more the first half of this year than the last half of last year.

Q. Is it your claim they will put out as much this year as last year?

A. I think so, of course, I don't know. Your guess is as good as mine.

Q. And the logging business is as bad this year as last?

A. You ought to know; you are transporting them.

Q. We are transporting much less is the reason I am asking you.

By Mr. Henderson: Do your figures show you transported less than in the last six months of 1920?

By Mr. Da Ponte: Yes sir, about half. Mr. Peterson's exhibit showing the first half of last year, revenue was 950 odd thousand for last year, and this year 500 and something thousand.

A. I think really, if you want my opinion, I think that the year

1921 will show as great an output of logs in 1920. All camps today are operating and have been for some time.

Q. That is your impression?

A. That's all.

Q. You say prices at the present time are what?

[fol. 1037] A. I don't understand you.

Q. 12/16/20, are they not?

A. I think they are.

By Mr. Da Ponte: That's all.

By Mr. Dudley:

Q. You said the cost of stumpage was $3.34?

A. I don't really know that, I think that it is that or $3.37.

Q. Through the three years, 1918, 1919 and 1920 they made a profit of 1.78 per cent?

A. Yes sir.

Q. That is something over 50% profit based on stumpage?

A. Yes sir, approximately.

By Mr. Henderson: You mean 50% more stumpage, you don't mean profit.

A. That 50% profit is produced on better than 7% interest on capital.

Q. You amortize the industry in your operating charges as you go along?

A. Yes sir.

Q. So this operating cost includes amortization of the property itself?

A. That is depreciation of the property itself.

Q. On that basis, say, if you had a ten year contract cutting one-tenth annually, one-tenth of the value would show up each year?

A. Yes sir, one-tenth of the value of the standing timber, or the original amount.

[fol. 1038] Q. And in case they have a logging railroad your operating cost, as stated, would show it, and the amortization of the logging railroad was an investment, would be wiped out dur- the term of the operation?

A. Yes sir.

Q. Is that true also of equipment?

A. No, not necessarily.

Q. Just of the railroad?

A. Of the road bed itself. Steel of course is handled in an entirely different method.

By Mr. Balmer:

Q. Do you charge for taxes in the months actually paid, or pro rata for each month?

A. You see taxes are paid in the spring, for instance, taxes for the year 1920 are paid in the spring of 1921. Then I take off of that amount, defer half of that account.

Q. 50 per cent?
A. Yes sir.
Q. Do you carry the account for your supplies, pay roll, expenditures, and material expenditures in the month in which they are used or do you charge these off when they are actually paid?
A. In the period when they are consumed.
Q. You set up a reserve account for wages unearned?
A. In this particular case there is not very much outlet, because supplies are not purchased in a very great volume. It is more of a [fol. 1039] hand to mouth proposition except fuel. You may have a tank full of fuel oil but most other things are a hand to mouth purchase.
Q. In your allowance for six months do you include any figures for interest on investment?
A. Not a dollar.
Q. Any charge for interest on borrowed money, what rate do you use?
A. The rate paid.
Q. What proportion of your investment is on borrowed money?
A. None of it. There is no borrowed money in my investment.
Q. Borrowed money is for only current expenses?
A. Capital does not include borrowed money at all.
Q. Do you pay the same wage scale in every camp?
A. As to that I cannot testify, I do not know.
Q. As regards supervisor's expenses charged into your operating expenses—is that a percentage charge for the management, that is, the owner who received the return on his investment?
A. Yes sir. In practically every case the cost is charged. The owner has a drawing account, or a checking account.
Q. And some relative percentage of supervisor expense to total expense?
A. I have not the figure to tell you. My full report will show that but I have not the figures here.
[fol. 1040] Q. Is a copy of that report to be furnished?

By Mr. Henderson: No.

By Mr. Dudley:

Q. In lieu of the depreciation on equipment what rate do you allow?
A. That varies slightly. Of course depreciation is nothing more or less than the present information. With us a certain piece of equipment will last so long. It has a lifetime of so much, but really, getting down to brass tacks, it is all a guess; but this depreciation that I am using will average about 10%; that is, 10% on every item used.

By Mr. Balmer:

Q. You do charge under operating expenses interest on funded debts?
A. Yes sir.

Q. Is that equivalent to interest on capitalization?

A. No sir, for instance, my invested capital does not include any borrowed money whether funded or otherwise, but the interest, or interest paid is absorbed as to operating charges. But there is no interest in my calculations at all for the invested capital.

Q. Let us suppose a case of this kind. Suppose a logger had an actual investment of $100,000 of which one half was in capital stock and one half was in funded debts. You would charge against the account operating expenses that one half that was covered by his funded debts?

A. Yes sir, and not include that in the funded indebtedness as invested capital.

[fol. 1041] Q. Can you state what proportion or what amount per thousand feet, which is your average unit I think, covering interest on borrowed money and interest on funded debts?

A. What per cent and per 1,000 cost?

Q. Yes.

A. No I cannot, I have not the cost here from which to get that.

Q. Is that one of the items covered by the report you make to the loggers?

A. Included in these reports?

Q. Yes sir.

A. Yes sir, decidedly.

Q. How often do you send these out to your loggers?

A. It is compiled as of the 30th of June and 31st of December.

Q. Semi-annually?

A. Yes sir, and annually.

Q. Do those reports merely cover certain divisions of all costs into unit costs of operation?

A. Yes sir.

Q. What possible objection can there be to submitting one of those reports in this record?

By Mr. Henderson: That is just what I am trying to find out.

By Mr. Irving: Some of our loggers are in California, and this system of bookkeeping was arranged so each logger——

[fol. 1042] Q. Can you give us the gross revenues for these several years of all the companies in your association?

A. I cannot. By gross revenue you mean what?

Q. The total money received from the logging operations.

A. The total of the log sales? A. Yes sir.

Q. Have you that?

A. Not here.

Q. Where is that?

A. That would be in this report.

Q. As I understand it, that report of yours would show the number of feet sold year by year and the average amount received per thousand feet?

A. No, it is not figured into the average to arrive at the average selling price.

Q. I understood you did have the average selling price.

A. You misunderstood me then.

Q. The report itself will show either in total or in items that can be gotten into a total the gross receipts of cost of your association for the years you have kept up that account?

A. Very plainly.

By Mr. Da Ponte: And the expenses?

A. Oh, yes sir.

By the Director: It is your intention to get the report here?

By Mr. Henderson: It is a large sheet and it would be an enormous [fol. 1043] task to make up sufficient copies for an exhibit. We will try to have one here tomorrow so you can all look at it.

Mr. J. E. Frost, being first duly sworn, testified as follows:

Examined by Mr. Horan:

Q. Please state your official connection with the Wallace Falls Timber Company?

A. I am vice-president and general manager of the Wallace Falls Timber Company.

Q. Have you occupied that position since the organization of the company?

A. I have.

Q. When was that company organized?

A. Incorporated I think about the 5th or 6th of September 1919.

Q. You are conducting a logging operation at Goldbar, Washington?

A. Yes sir.

Q. You ship your logs to Everett over the Great Northern?

A. We are conducting a logging operation in the vicinity of Goldbar and so far our logs have been shipped over the Great Northern Railroad to Everett.

Q. This is the same company, is it not, about which testimony [fol. 1044] was introduced yesterday with relation to transportation of its logs over the Great Northern?

A. This is the company testified about yesterday as being the largest shipper of logs over the Great Northern.

Q. As being typical and representative company in operation of their business?

A. As I understood. In that connection I would like to make a statement that a witness for the Great Northern Railroad perhaps, not having so good a memory by lapse of time, as I have, testified that we have been operating about three years. The fact of the matter is I began logging operations on the 28th day of January 1920, put in one side. In March we started the second operation of two sides, our logging camps were not increased to three side capacity until about the 15th of May 1920, so that our operations have been conducted—that is, we have been in a position to log about one year and 7 months.

Q. What preparation did you make at those works for the purpose of facilitating the handling of those logs by the Great Northern Railroad?

A. Our first preparation for handling logs over the Great Northern Railroad consisted in the construction of yards of siding connecting with the Great Northern R. R. within their yard limits, about one mile, or nearly two miles from the station at Goldbar. [fol. 1045] Our yard limits were afterwards extended to embrace the east end of our double side track. We built sidings on the right of way of the Great Northern R. R. at an expense of say, about $25,000. That siding is connected with the Great Northern Railroad at both ends, 2,790 feet in length, double track siding, with cross over switch in the middle. And connecting with those side tracks are the main line railroad for loading and unloading our timber, and over it we deliver logs to the Great Northern Railroad. I will say this: that our side tracks are arranged so that it is not necessary for the Great Northern R. R. as a matter of fact, they have done no switching on our side track or on our sidetrack. The log trains are made up as far as we are concerned, loaded cars are put in on the side track and the air is connected up with them when when we get them down here. Before delivering them we make a thorough inspection of the brakes, because we bring them down every week, cars smashed up to 8 to 9 per cent grade. The switching is done at the yards. The end of the track is within a mile of the depot platform in Goldbar and the Great Northern train crew picks their caboose up on the main track, hooks onto the logging train, pulls it out, hooks on to the caboose and the train goes. Those logs are hauled to Everett and in that connection I want to correct another statement. And that is that in some figures given here the mileage from Goldbar to Everett [fol. 1046] has been variously stated as 31.3 to over 33 miles. The mileage shown by the Great Northern R. R. records. I went to the station agent before I came to this hearing and by their records it is shown as 27.7 miles depot to depot, that is in the exhibit in the folder here, and I verified that before I came down. I make this suggestion because of the fact that in estimating the cost of these log trains figuring the mileage value of the Great Northern value, the percentage of taxes chargeable to our operations and those charged to others, they have given us approximately four miles more than our train actually moved over, which amounts to a difference of approximately 15 per cent in the real value of the railroad over which our logs move. These logs so far have been delivered to the Weyerhauser dump at the Weyerhauser Mill B which is stationed upon the Snohomish river. The Wallace Falls Timber Company constructed those sidings. We did the grading, furnished the rails, paid all expenses and laid all the tracks except two switches connecting with the main line of the Great Northern R. R., which were put in by the Great Northern R. R. to a clearance; that is, put in a sufficient distance so we would clear the main track.

Q. What was the investment that you made with a view of facilitating the operation of those trains? I mean the track investment? [fol. 1047] A. I think I may speak of the Cedar Lake Logging

Company cost because I expect to testify as to the logging costs in that building operation. I was general manager of the Cedar Lake Logging Company at Cedar Falls seven years, and shipped over the Milwaukee Railroad. The men who organized the Wallace Falls Timber Company were largely, or expected to be stock holders of the Cedar Lake Logging Company. The Cedar Lake Logging Company sold all its equipment to the Wallace Falls Timber Company. Some of my associates refused to go into that organization because we were going to be logging on the Great Northern Railroad and that railroad had not been friendly to loggers. In order to satisfy myself before we made the purchase of timber at the time when I had a holding option on approximately 1,368,000 dollars, I had conference with Great Northern officials, Mr. Costello, Mr. Jenks and Mr. O'Neil. I think Mr. Costello is Assistant Traffic Manager and Mr. Jenks is vice president now and Mr. O'Neil was assistant general superintendent. I explained the situation to them and told them I had an option on this timber but was not going to buy it unless I had their assurance I would receive their assistance and I could get over the road. We had a very nice time and ultimately all three of us went out and consulted with the division engineer of the road so as to be satisfied that our connection would be all right. We got to talking car situations, which is a vital thing to the logger. Nothing is more harmful or expensive to a logger than a car shortage. They suggested to me that if I would equip 100 cars with steel bunkers for [fol. 1048] those cars they will be assigned exclusively to my service. I agreed to that and one of the first things we did was to buy 100 sets of the Ranier Bunks from the Seattle Car & Foundry Company and at the present time we have 93 Great Northern 43-ft. standard flat cars equipped with Ranier bunks that are used in the service of the Wallace Falls Timber Company in hauling logs from Goldbar to their destination.

Q. When did you equip the last 20? It was 73 total on this report.

A. The first equipment was put on during the fall of 1919. They originally equipped 76 cars. Those bunks were shipped to the shops at Delta or Everett and were put on by the Great Northern Railroad. They billing me for the freight and expense of putting them on. Afterwards they shipped the remaining 24 to our camps east of Goldbar and as 43 foot open flat cars showed up in the works from time to time at the request of their crews these bunks were put on by ourselves on the remaining of the 93—17 cars.

Q. Have you stated the total investment or purchase price of those bunks?

A. The cost was approximately $27,000.

Q. I wish you would describe to the commission the system of logging as carried on at your camp, particularly with reference to the bearing which the car situation has upon the financial success of the company.

A. Logging operations are divided into units; that is, so far as getting the logs out of the woods is concerned and onto the car. [fol. 1049] Units known as sides in the language of the logger. In a logging operation the first thing we do is to make a very careful and

accurate topographical survey of the country. Then we lay out the railroad system necessary to get cars to the logs where we can pull the logs out of the woods. We are constantly engaged in railroad construction. During the year 1920 we constructed over very difficult terraine in some instances 14.9 miles of railroad used in logging operations. In one instance we built a bridge 452 feet long with a 62 foot span, 100 feet high, and we have four small bridges. Those railroads are constructed into the timber and we endeavor to locate the railroad so that they will cut the timber in such a way that a yard line or wire rope from a donkey engine will get the trees to the loading point. A substantial straight, strong, sound tree is cut off at the top. We usually cut them 180 to 190 feet in the air. The tree is rigged with wire guy lines and two deck lines upon which the loading apparatus is hung. We use two donkey engines; one that hauls in the logs with a wire rope from that donkey going through a high lead block near the top of the tree and run out in the woods with a haul back line. Logs are fastened with a wire rope hook and we bring the logs in sometimes one, sometimes four or five, and they are dropped at the foot of the tree and picked up by the loading donkey and placed upon the car.

Q. That is one side?

A. Yes sir. The whole operation of hauling these logs in and [fol 1050] loading them on the cars including the donkey engines is called a side. We are equipped at Gold Bar to operate four sides. As a matter of fact we have more than enough equipment to run four sides. My camp, donkey equipment, etc. and dining room are still sufficiently large to take car- of land and construct a railroad for four sides and do the falling and bucking for four sides.

Q. Describe what you mean by falling and bucking.

A. After the railroads are laid out it is the first step in the direction of moving logs. Men go into the woods with cross cut saws, spring boards and wedges and proceed to fall the timber and that timber is felled. We lead or fall all timber in the direction to make it pull toward the spar tree. The trees are felled by buckers who then saw the fallen tree up into log lengths. They are equipped with cross cut saws. The fellers work in pairs. The buckers alone. Each one with ax and wedges and saw and all of them carry oil bottles to grease their saw. The logs are cut up and when we get a sufficient amount in—we usually figure on a landing. All of the logs to go from one side of the track have this spar tree. The spar tree is located immediately adjacent to the track, right up against it. That is the operation that precedes the loading of the logs just described. After they are on the cars they switch usually eight cars by half a day's loading. They switch for each side once in the fore- [fol. 1051] noon and once in the afternoon. The cars are moved in the siding with a siding line and we are ready to load from the donkey. As we load one car this donkey engine pulls its strength of load and empties so as to pull up and spot the next car.

Q. For efficient handling of your product it is necessary to have a sufficient number of cars on each siding for these different operations?

A. In order to operate without serious inconvenience and loss it is necessary to have cars on the ground every minute from the time the whistle blows in the morning until it blows at night, and as a matter of fact cars are spotted at the loading place all night too. It has to be done unless you have three locomotives to operate.

Q. Have sufficient extra cars been delivered to you at the switch that you have named, delivered at your siding?

A. Yes sir. We are operating there regularly and can run every day.

Q. Can you state how many sides you operated in 1920?

A. One side from the last of January to the middle of March when we got opened up and put in two sides. About the 15th of May I started up three sides but I was forced ot abandone the attempt to use three sides because I was unable to obtain cars. The result of that failure to get cars was you would be loaded out at maybe half past two in the afternoon and an hour's work waiting at the landing, [fol. 1052] and it was impossible to get any more logs in, and day after day we could not get cars, and I would find the members of my loading crew leaning up against the stumps fast asleep. We were paying wages, and increased cost of labor and conditions as they existed in the woods, were such that you was up against it. Since that time I have not tried to operate three sides. During a portion of the time that we have operated in 1921 I have only run two sides. I operated 3½ months during 1921 with two sides. We have had an abundant supply of cars, there has been no car shortage, but I have not since then undertaken to run my camps to capacity.

Q. The reason you only operated three sides was on account of market conditions?

A. In 1921 I operated two sides for three and a half months during the present year. During 1920 I would have been glad to operate three or even four sides if I could have cars.

Q. You have capacity and service for four sides?

A. Yes sir, at all times.

Q. The only reason you did not do it was on account of shortage of cars?

A. Yes sir, there was an active demand for logs.

Q. I wish you would go on and describe the operation after the logs are received at the switch. When do your loaded trains arrive at the switch in the ordinary course of operation?

[fol. 1053] A. Our lines dropping down hill takes place in the afternoon so that the train crew delivering the last load from the woods to the Great Northern connection are able to get back a distance of a mile and ¾ and clean up for supper when the bell rings. They are delivered there at 4:30 or so in the afternoon. Our quitting time is 5 o'clock. That gives them an opportunity to get back and clean up at quitting time.

Q. All inspected and coupled up ready for moving?

A. We do not move a car out of the woods until we make a thorough examination and adjustment of the brakes if there are any not in perfect order. We operate all of the cars with air.

Q. They are all coupled up at the switch?

A. All that is necessary for the Great Northern Train crew to do is to hook on the locomotive and caboose to start. That is all.

Q. Describe your unloading operation—you unload at the Weyerhauser mill at Everett. Describe that dumping ground.

A. Those logs go over our connection to the Great Northern Railroad and buy that road to the Weyerhauser dump at their mill B on the Snohomish river in the city of Everett. In that connection I would like to say this, although perhaps it is irrelavant and immaterial. The Weyerhauser Timber Company has been mentioned frequently. [fol. 1054] It is all right. It is apparent that some odium attaches to the name. I don't know why. I want to say that the Weyerhauser Company has no connection with our business of any character. They own none of our stock. I have not bought any standing timber from them excepting two or three years ago about 40 timber tracts embodied in our holdings. We have no affiliation with the Weyerhauser Timber Company, or affiliation with their interests in any way save our logs are dumped by the Weyerhauser Timber Company at their mill B, and that so far my fir logs and hemlock have been sold and are manufactured by the Weyerhauser at their mill B. The cedar logs are shorted and sold elsewhere. The logs are taken down to the Weyerhauser dump and there we lose control of them. I pay the Weyerhauser Dump Company 35 cents a 1,000 for dumping those logs into the salt water. Last year they charged us 50 cents. They reduced the price this year because the price of labor and logs went down. The Weyerhauser Dump is capable of handling 40 cars. Our entire log trains is switched on to the Weyerhauser dump. A traveling steam crane is used to unload the cars. This crane travels on a track parallel with the dump track which stands out on the edge of the water. This steam crane is on with a wire cable and lines that lead under the load. The cable is passed under the load to draw hooks that hook over what is known [fol. 1055] as a bow-skid. The face of the dump is piles driven in a solid row. The cars hang close to the edge of the water and they put these hooks right over and the crane picks up the entire load and throws it off. The dump has a capacity to take care of 40 cars in 60 minutes. In other words, it takes an average of one minute to unload a car. There may be a little rough handling perhaps, sometimes they don't trip the bunks. I find occasionally our bunks are jimmied up and it has been a subject of some controversy between the company and myself but they insist they do trip the steel bunks although in unloading cars equipped with wooden stakes they have refused to cut the stakes saying it is risky and they will not subject their employees to this and the result is they go through the same operation and hook the logs over the wood stakes and break them off. and in doing that they usually damage the car, and in some instances they twist the side sills, and in other instances they pull a whole stake pocket out.

Q. Those are the cars not equipped with the steel bunks?

A. During the period of 1920 when we had 76 cars the unloading of our cars by the Great Northern Railroad was so inefficient and

there was so much delay in getting cars back that 76 cars did not *being* to supply us and we had an equal number of ordinary flat cars, [fol. 1056] or open face cars in the works so that practically all of our logs in 1920 were shipped on cars with wooden stakes, and those cars were repeatedly damaged.

Q. With that method of unloading did it have the effect of causing the top log to fall to the deck of the car?

A. No, because the whole load moved. The load starts with the log farther from the dumps, they push that over the edge of the car and it slides, the whole load.

Q. So there is not at least at the unloading a hammer blow on those bunks such as was testified to by Mr. Turnburke?

A. By Mr. McDonough.

Q. I believe there was some testimony to the effect that your unloading crew would place this hook in the sill of the car instead of upon the socket.

A. It is much easier and safer to put it in the browskid, but the men don't do that.

Q. These broken car sills, such as might result from unloading are almost entirely upon the cars not equipped with steel bunks?

A. Very likely upon cars not equipped with steel bunks, but I might say cars on which our steel bunks were placed were all cars that had seen much service, among them, the first time they came in with new steel bunks had cracked sills and under sills damaged, and generally in bad condition. They were not really first class cars to start out with. Perhaps occasionally something might [fol. 1057] happen but very rarely to injure any car equipped with steel bunks, and one reason for that is that a load on the steel bunks slides readily on the edges of the steel bunks and the whole load moves. Where you load logs on flat cars without bunks there is nothing to lift the notches and rough portions of the logs over the deck of the car and they don't slip so easily, and the result is that the decks of the car, and sometimes the sills are damaged.

Q. With reference to location of that Weyerhauser dump at Mill B, is there any necessity for your trains going into the yards at all?

A. I am not well enough — with the yards of the Great Northern perhaps to answer that. I do not know how the Great Northern, the Milwaukee and the Northern Pacific are interlogged and tangled up, but there is no reason I know of why the locomotive that hauls these from the yards at Delta should not spot them on the dump when they get there. I cannot see any reason why not.

Q. No necessity for not expecting that engine and caboose to switch the car in?

A. Not if they are operating a log train and have logs exclusively. Perhaps if they have a mixed train then perhaps you would have to go down into the yards and switch the cars up to get them back.

Q. All of the logs constituting a belted train could be sent on [fol. 1058] down to the Northern Pacific dump for the Sulton Timber Company to be spotted there?

A. I should think so.

Q. Referring to the exhibit of the Great Northern, testified to by their statistician Mr. Turnburke, exhibit No. 23 on sheet four,

they have apportioned the cost of switching for those logs and the logs of the Sultan Ry. and timber Company upon the basis of the number of cars handled during July and August of 1921. They show a total of 16,959 cars handled during those two months and the cost is divided by the number of cars so that the result of it shows a cost of $2.36 per car.

A. During July and August 1921?

Q. Yes sir. That is, that either you or the Sultan Ry. Co. delivered any cars to the Great Northern R. R. July or August 1921.

A. Neither the Wallace Falls nor the Sultan Company shipped a single car during July or August 1921. There were none in the yard.

By Mr. Balmer: I think you misread those figures.

By Mr. Turnburke: I think I testified the number of cars were the total in the Everett terminal and did not represent cars handled by those companies.

By Mr. Horan: You arrived at the cost of $2.16. The cost would have been somewhat lower if the number of cars were increased.

[fol. 1059] A. The statement shows cars handled at Everett, in July, 7,798; in August, 9,461, or a total of 16,959 cars. I will reiterate that neither the Wallace Falls Timber Company nor the Sultan company shipped a single carload of logs to Everett in July or August of 1921.

Q. 54 cents of the cost is based on other yard expenses, and for total cost per car for yard service they charge $2.36?

Mr. Turnburke: Yes, sir, and I did not obtain that by dividing the total cost of terminals by the number of cars, handled.

Mr. Balmer: We will explain our exhibit later.

Q. Referring again to Great Northern Exhibit 23, on sheet 9, the valuation of the Great Northern Railway Company line between Goldbar and Everett is based upon the report of the State Equalization Committee for 1921, at $103,124.75. Can you tell how that valuation was arrived at?

A. During the years when the assessments of railroads was transferred from the local county assessors—in 1908 and 1909 I was a member of the State Board of Tax Commissioners of the State of Washington. I served in that capacity from the time the Board was created, and took office in June, 1905, until the first of July, 1912. The legislature of 1907 imposed upon the tax Commission the duty of assessing the operating property of the railroads and other public service corporations doing business of a general nature throughout the State. The value of the railroads was ascertained by the Public Service Commission in 1908. They found the value of the operating properties of the Great Northern Railroad and of the Northern Pacific, and the Chicago, Milwaukee & St. Paul and other railroads within the State of Washington; they gave the total value of the total operating property in one sum; that value was divided by the [fol. 1060] Tax Commission; it became necessary for the Tax Commission to apportion these values to various counties, roads and

school districts, and some method had to be determined in furnishing a method for it, and the only information we could get from the railroad was of car mileage; we were not able to get gross tonnage, although we asked for it. We got car mileage upon the various branch lines on these various railroads and main lines and that total value was distributed to the branch lines and main lines of the railroads in proportion to the amount of car mileage that moved over each of these branch lines or main line of the railroad. I should like to go back and say that at that time the value of the railroads was the reproductive cost of the road, plus the value of all the terminal property of the road, including property at the terminals that was perhaps not then used in the operation of the road, but that might at some time in the future be necessary or required under different conditions for the operation of the road, and in that connection I spent many days in the terminal cities of Seattle, Tacoma and elsewhere, examining this property; I personally went over all the property of the Northern Pacific, and Great Northern and Chicago, and Oregon Washington, and made examination of that property; and I am informed that no change has been made in this distribution of the values of those railroads to main line and branch lines except as the Public Service Commission has found from time to time there have been additions or betterments to roads; and the value of these additions or betterments have been certified to the Tax Commission and have been added to branch line or to main line and figured into the mileage.

[fol. 1061] Q. It is the equalized valuation of that road for taxation purposes that was used by every system?

A. Total assessed value.

Mr. Daponte: It was the Railroad Commission's that was used for taxes.

A. That is what I said, that the valuation fixed by the Public Service Commission was adopted by the Tax Commission and the Public Service Commission reproductive value, plus additions—and the tax commission fixed the per mile value on these valuations at that time, and the Tax Commission of which I was chairman ascertained the mileage valuation of the railroads in school districts through an apportionment of the total value in proportion to car mileage that moved, and that is exactly the method employed. I figured it myself.

Q. I call your attention to an exhibit introduced by the Great Northern Railway Company in the cases before this Commission wherein the Wallace Falls Timber Company was Complainant and the Great Northern Company was respondent, and known as Utilities Exhibit No. 3——

Mr. Balmer: The record was objected to—I repeat the same objection made by Mr. Henderson to findings of fact and order of this Commission in that case, which were the most dignified part of the case, and which I was not able to put in afterwards, and if I did not know that you put the findings and conclusion of this Department in the record in this case——

Mr. Horan: I am going to have him testify to what that contained.

Q. I will ask you what was the valuation per mile of the Great Northern main line, Goldbar to Everett, as shown by this exhibit which was offered by the Great Northern Railroad Company?

Mr. Balmer: I object, on the ground that that is not the best evidence.

[fol. 1062] A. I can overcome your objection by testifying that in a former hearing before this Commission I listened to sworn testimony of officials of the Great Northern railroad, who testified that the value of the Great Northern Railroad from Goldbar to Everett as determined by the Public Service Commission of this state, was $88,-726.04 per mile; whereas Mr. Sternberg has used a value of $103,-124.57.

Mr. Balmer: In view of the fact that I have permitted incompetent evidence to go into the record, would you permit me to suggest that the valuation shown in previous exhibit was only main line mileage, whereas Mr. Sternberg in his exhibit has added to that main line mileage the value of the sidings, and that addition accounts for the dicerence between the two exhibits.

A. No, I can not see the reason, because it was decided that was the valuation of the railroad, and there was no distinction between sidings and main line. That was the returned value of the property between Goldbar and Everett. In this instance, Mr. Sternberg has drawn a distinction.

Mr. Balmer: If you will take the figures shown in past exhibits and compare it with the report of the State Equalization Committee for 1921 you will find the state finds its value of the main line of the Great Northern Railway, and then added to that figure the value per mioe of sidings between Goldbar and Everett, which exactly amounts to the difference between the two figures in the two exhibits. As to an assessment board, a member of a body is incompetent to testify to value unless he qualifies as an expert and the valuation of any property by an assessment board is not competent evidence in any judicial proceedings except to show the assessed value. It is not competent testimony to be taken into consideration as fixing the value of [fol. 1063] that property, and the courts have so ruled repeatedly.

Q. I do not know as you made clear this matter of mileage between your logging switch and the dump?

A. Witnesses for the Great Northern have persistently swelled the mileage. The actual mileage as given to me by the agent of the Great Northern Railroad last Saturday, is 27.7 miles, Goldbar to Everett. Delta is this side of the station at Everett and consequently would be a shorter distance. They have repeatedly put the distance from our track at two miles, and it is nearer a mile; that adds to their mileage value and their capital value and their tax value that they have undertaken to charge for. This expert statistician would bring my logging miles up eighteen per cent.

Q. They charge for their movement of caboose and engine from your logging switch down to Goldbar and back?

A. I imagine that is what they do; they figure mileage all right! I would like to call your attention to the fact introduced by the Great Northern in this hearing showing the distance to be 27.7. It is an exhibit introduced by Mr. Bolander.

Supervisor Cleland: Might that not be 27.7 miles of main line track, and they included the other four miles as station?

A. They are figuring the movement of the log train, and the distance station to station is 27.7. The log dump at Delta is between Goldbar and the station at Everett.

Supervisor Cleland: In the actual movement of the cars do they come to the station at Everett?

A. No, sir, do not go through to the Station.

Supervisor Cleland: They stop at Delta which is intermediate to Everett and Goldbar?

[fol. 1064] A. This is what their statistician has undertaken to do. He has undertaken to show that there are 33 and a fraction miles of the main line on that railroad, at $16,300 a mile, that are used by the Wallace Falls Timber Company; he has based his cost of hauling logs upon that assumption of 33 plus miles, and he is calculating taxes &c. If you are going to adopt his basis of valuation you can only use the actual mileage. He has used 33.3 and the actual mileage is perhaps 27.7 or 28; that swells his cost up about 16½ per cent.

Supervisor Cleland: A solid train load of logs moving from Goldbar to Weyerhouser Mill B, what would be its operation if there were no other cars in the train; that is, no other commodities going to Everett or other destination than Mill B?

A. They would go directly from our connection one mile East of Goldbar to the Weyerhouser Mill, but what is the distance I do not know. Only the railroad men can give that; but there is no reason these logs should not be delivered immediately to the dump.

Supervisor Cleland: You mean that they do not go to the yard or siding?

A. They never go within a long distance of the station, no sir.

Supervisor Cleland: A mile or two.

A. I guess about two miles this side of the station. I am perfectly willing to take Mr. McDonough's word for it if he can tell us.

Supervisor Cleland: The distance from the Weyerhouser Mill B dump to the station at Everett.

Mr. McDonough: Take Lowell trains coming from the East, coming to Seattle, they branch off up there, Everett freight station to [fol. 1065] Everett passenger station; there is a junction at Lowell with the Northern Pacific, and trains going into the Delta yard take the Northern Pacific at Lowell and go into the Delta yard, to the right. The distance Lowell to Delta is 3.3 miles. The distance Lowell to Pacific Avenue is 1.6 miles. The distance from Delta to Everett freight station is 4.9 miles.

Supervisor Cleland: Would that be intermediate to Goldbar?

Mr. McDonough: No. There is two arms of the railroad; on one is the Everett freight station and on the other is Delta.

Supervisor Cleland: What is the distance Lowell to Everett station?

A. 1.6 miles.

Supervisor Cleland: Distance Lowell to Delta?

A. 3.3 miles. The distance is—we have a Great Northern time table showing the distance between stations; that means station building to station building.

Supervisor Cleland: Passenger?

A. Passenger stations. These distances are taken from engineering department's measurements. The distance between Goldbar depot and Delta there is 29.3 miles.

Supervisor Spinning: That is the distance of the log movement of Frost's logs from Goldbar, 29.3?

A. That is the distance logs move from Goldbar depot to Delta yard. Then the Goldbar log tracks are over a mile east of the east switch at Goldbar. It is approximately two miles east of the depot to the east end of the Goldbar log tracks.

Mr. Frost: I got my 27.7 miles from your agent Saturday.

Mr. McDonough: That is the distance tariff from Goldbar, from Goldbar to the Everett depot; the time cards shows it as 27.6.

[fol. 1066] Mr. Frost: When you arrive at Lowell and switch off, do you go over your main line to Delta?

Mr. McDonough: No, over the Northern Pacific main line to Delta.

Supervisor Cleland: What is the distance from Lowell to Goldbar?

Mr. McDonough: Lowell to Goldbar, 26 miles.

Mr. Frost: It is apparent you are only hauling our logs over your own road twenty six miles plus the mile from Goldbar to our siding, and the rest of the way you haul them into Everett over the Northern Pacific, and under these figures of your statistics you are charging, or trying to charge us instead of 27, 33 miles. We are not using——

Mr. McDonough: You are paying interest to the Northern Pacific.

Mr. Frost: So that correction shows instead of 33, they are only using 26 miles plus one mile from Goldbar to our logging switch, and they would not assert the sidetrack was worth $103,000 a mile.

Mr. Balmer: If we operated over the Northern Pacific to Goldbar we would be entitled to no return?

A. No. Whatever you pay the Northern Pacific you would be entitled to, but you would not be entitled to pay capital investment on property you did not own and you would not be entitled to figure proportion of taxes at $103,000 a mile on property that don't pay taxes, or charge to our operation.

Q. What is the distance from Lowell station to Delta?

Mr. McDonough: 3.3 miles.

Q. Two exhibits have been submitted by the Great Northern Railway Company, one covering a period of 52 days preceding June 25, 1921, and the other supplementing that and extending down to October 17, 1921, so they cover repairs from about May first or second, 1921, up to October 17, 1921. Can you tell how long your

[fol. 1067] camps were operating or delivering logs to the Great Northern Railway in that period?

A. Our camps delivered logs to the Great Northern railway from June 25 to June 30. The camps closed June 30th for five days. We resumed shipments again on the 13th of October, so that we were shipping logs over the Great Northern from the 13th to the 17th of October, and from the 25th to the 30th of June, that is, four days that we were operating during the period covered by this report of repairs. All of the cars equipped with our bunks during the period from about July 2 to October first, were placed on our side-tracks at Goldbar. They remained there and were not removed during the entire period until about the first of October. No repairs of any kind were made upon them; I saw those cars every day, and would have known if any repairs were made. About the first of October they took 24 cars, moved them about a mile to Goldbar, and they remained there until we resumed operations. I personally went down and counted them and asked the agent to send them back. They had no opportunity except during nine days to make repairs upon them because the Great Northern has no repairmen at Goldbar.

Q. I wish you would——

A. I would like to say further that I am familiar with Mr. Irving's operations. He is my next door neighbor; I go past him, and during the period from the 25th of July until the first of September he was not operating or shipping any logs, so that they had very little opportunity to repair any of his cars. If I may state an impression it is that this bill must embrace all of the flat cars for every purpose put into the yards, because they certainly did not repair any for us [fol. 1068] excepting during nine days.

At this point the hearing was adjourned, at 5:05 P. M. until 9:30 A. M. to-morrow morning.

[fol. 1069] October 28th, 1921—9.30 a. m.

Hearing continued, all parties present as before.

Mr. Frost on the stand.

Continuation of direct examination:

Mr. Horan:

Q. When we closed last night I was questioning you with relation to the car repairs. The exhibit filed by the Great Northern at the previous hearing shows a statement of the cost of repairing cars for a period of 52 days previous to June 25th, practically from May 4th to June 25th; were you operating during that time in 1921?

A. Yes, we were logging during May and June.

Q. Can you give me any idea of the number of cars you handled during that period, approximately?

A. I can give you the exact number of cars that we handled. During the month of May we loaded 448 cars. That is the entire

month of May, and during the month of June we loaded 521 cars, making 969 cars.

Q. And during that period, as I understand you, you testified that the Sultan Railway & Timber Company was not operating?

A. They were not operating.

Q. The statement filed for that period shows that 1,608 log flats were handled into Delta during those less than two months. Your statement shows 969 flats, was that all you handled?

A. Yes, all I handled.

Q. Do you know where the rest of them came from?

[fol. 1070] A. No, I have not the remotest notion.

Q. Now when a brakestaff on a car is broken or is found to be broken after it gets to Delta is that car returned to you the next day, or does it go into the shops for repairs?

A. I don't know that I am qualified to testify, only from hearsay I have heard from Mr. McCaustland and Mr. McDonough that there was certain Interstate Commerce regulations, some requirements fix- by law that will not permit the car with a defective brakestaff or grab iron, or other safety appliance to go out of the yard until it is repaired.

Q. This statement shows that during that period 1,450 brake staffs were damaged and replaced—are removed and replaced rather—and yet you only sent 961 and no one else sent any——

A. Mr. Irving was not logging and nobody else was logging.

Q. Assuming that 1,600 log flats were handled into Delta during the 52 day period—there is only one brakestaff on a car?

A. That is all.

Q. 1,608 log flats were handled into Delta during that period and 1,456 brake staffs were removed, it would mean that practically the entire train went into the shops during that time?

A. Yes, that would be the irresistable conclusion.

Q. All but 100 out of 1,600 cars were repaired. Now is there any necessity for the injury for these brakestaffs and brake beams in your [fol. 1071] operations if the brake beams or brake staffs are properly located——

A. If the brake staffs and brake sills were placed in a condition to make them fit and proper for logging operations on a log flat, it would be very very rarely that there would be any injury had to the brake wheel or to a brake staff. The brake staffs and brake wheels are so arranged on the cars of the Great Northern Railway that it is practically impossible to unload a car on the brake wheel side, or to load the car on the brake wheel side without doing damage to brake staff or the brake wheels.

Q. Just go on and describe the location of that brake staff.

A. If I may say so that is the condition that has been repeatedly called to the attention of the various Great Northern officials. Mr. McDonough, superintendent of the Great Northern at Everett had accompanied me to the woods and watched the loading of the cars and I pointed out to him the impossibility of loading cars on the brakestaff side without doing a lot of damage. Mr. Doyle has also been in the woods with me on two different occasions.

Q. Who is Mr. Doyle?

A. I don't know.

Q. What position does he hold?

A. I am going to ask some of these railroad men—Mr. McDonough, what is Mr. Doyle's position?

Mr. McDonough: He is superintendent of the Spokane division; he was general superintendent.

A. (Continuing:) And then it has been the subject of correspondence. I wrote fully to Mr. McDonough and Mr. O'Neill, and I [fol. 1072] sent letters to both, in which I called attention to the condition of their cars with reference to brakes and brake staffs and brake wheels, and stated that I would refuse to be responsible, or refuse to pay any bills for repairing brake staffs and brake wheels so long as they insisted on keeping them in a position where it was impossible to load or unload a car without damaging them. I also pointed out how on the Milwaukee road, for instance, the brake staffs were put in in a way so that from an operation of seven years we never heard anything about brake wheels or brake staffs. The decks on the Great Northern cars are equipped with steel bunkers so placed on the side of the car about midway between the log bunk which is just a little forward or towards the center of the car, from the bolster at the end of the car. The brake staff is cut so that the top of the brake wheel, that is, the top of the brake staff, is about level with the top of the bunk. The steel bunk projects over the edge of the car flatly and the brake wheels project beyond the edge of the bunks exactly 7 inches, so that in rolling a log off the car, as it drops off the car, this 7 inches of the brakewheel is directly in the way in its getting off. In loading logs, the logs are brought by the cars to —, as we call it; it is a log that runs parallel with the car and below the deck of the car and the log swings in and is picked up by a donkey engine by what we call a crotch line, and when that log comes in—if it is loaded on the brake side of the car, in a great [fol. 1073] many instances it will swing under that 7 inch projection of the brakewheel, and tip the brake staff and wheel over on to the deck of the car. And of course there is a great portion of the time at the log dumps when the brake staff will be on the landing side, or on the opposite side from which the logs roll; and about half the time in the woods the brake staffs are on the same side, the other half of the time they are where they are exposed to injury because we are loading first from one side of the track until we get to a spar tree and then we turn around and are loading on the other side, and of course we have no facilities for turning that car around and removing these brake staffs. The brakestaffs would be more efficient—that is, the brake arrangement would be very much more efficient if the brakes were placed at the end of the car. It would obviate the damages that were occasioned by loading and unloading as I have described, and not only that, but it would make the brake for handling in the woods on the grades that we have a very much better brake on direct pull, because as it is now the brakes being over draw bar is forced to run around a post, or you might say a roller which has no roll in it, and then come around at an acute

angle; so it makes a very inefficient brake as far as applying the brake is concerned. Also if the brakes were put in the end of the car we would do away with that and it would practically double the brake power of the brake wheel and brake staff. The Milwaukee road over which I operated for seven years uses the folding brake staff and brake wheel. The brake is placed on the end of the car and is a device that occasions no trouble and is practically safe. It permits that brake staff and wheel *and wheel* to be forced down so [fol. 1074] that the brake wheel lies up against the body of the car and it is out of any chance for possible injury in there in either loading or unloading, and during that 7 years' operation I never heard anything about or really ever saw an injured brakewheel or brakestaff.

Supervisor Cleland: How would a man operate a brake wheel on the side of the car if the car was loaded with logs?

A. Well, when the car is loaded with logs it is about the only place that he can operate it because there is no room on the end of the log cars for a man to ride or stand, and he can operate it as we do in the woods, by standing on the ground along side of the car and turning that brake up. They can be readily set from the ground But in operating the Milwaukee cars we turn the brake staff down for our own purposes in the woods, for the purpose of conveniently setting the brakes in order to hold the car, and when the car is loaded and the train is ready to move we stand the brake staff up in its original position and the brakestaff operates the brake equally efficiently either folded down or standing. It doesn't seem to make any difference about that.

Supervisor Cleland: Well, can you operate one of those brakes on the side of the car, the hand brake, except when you are on the ground?

A. You cannot handle them because the logs project beyond the end of the cars, and it is practically impossible to set that brake in anyway.

Mr. Horan: Which way?

[fol. 1075] A. On the side of the car; the log will be over the top of the brake wheel or a part of it, and a man is not in a position where he can stand on a moving car and and where the top of the brake wheel when it is loaded with logs—that is the present condition of the Great Northern flats we are operating. And a great many times even with a load of logs on the cars the brake staff projects far enough above the deck of the car so that the log is perhaps resting on the brakestaff or on the edge of the brakewheel and it makes it impossible to operate the brake and all in about 50% of the cases; that is, operate the handling. And I want to reiterate that if the condition that is so well known to the officials of the Great Northern, and it is well known because I have discussed it with them and I have written to them about it, and talked to them repeatedly and gone on record and stated that I would refuse to be responsible for any injury occasioned to those brakes for the further reason I have assigned here.

Q. Have you or the Great Northern officials ever made an estimate as to what the expense would be of changing the position of those brake staffs?

A. Mr. McCaustland in a former hearing before this Commission testified as to what the cost of re-arranging those brakes would be, but I don't remember, it seems to me that his testimony was to the effect that it was something like $12.00 to change them. I may be wrong. Mr. McCaustland is here, but I distinctly remember his testimony——

Q. So that on the set of the odd cars that were in your service for [fol. 1076] and expense probably of $850 the item of damage occurring during that period of over $2,073.00 could be probably eliminated?

A. Yes.

Q. $2073. on 1600 cars?

A. Yes sir.

Q. Is there anything else you want to state with reference to these reparis, grab irons, sill steps or end sills. The Great Northern also filed an exhibit covering a period extending from June 25th to October 10, 1921. Now as I understand your testimony you only operate for five days?

A. We were operating for five days in June of this year and we shipped our first logs on the 13th of October of this year. We shipped no logs between the 30th day of June and the 13th day of October—we shipped none. Mr. Irving was not operating at all—that is the Sultan Railway & Timber Company had shipped over the same line—*ern't* operating at all during the year 1921—the present year—until the 1st of September, and my recollection is that he began operations about the 1st day of September.

Mr. Balmer: Did you say that the Sultan Ry. & Timber Company did not operate during the year 1921, until the 1st of September?

A. Yes sir, that is to the best of my knowledge and belief. Mr. Irving is here he can speak for himself.

Mr. Balmer: Mr. Irving has already stated the contrary.

[fol. 1077] A. I don't think so, he is here. We can ask him and settle the matter.

Mr. Irving: I have the statement in front of me now.

Q. I would like to ask Mr. Irving——

Mr. Balmer: My only suggestion is that Mr. Irving be permitted to testify on that himself.

A. I passed Mr. Irving's railroad two or three times a week back and forth and that is the best of my knowledge from my observation of things in the woods, and I noticed those things pretty carefully.

Mr. Irving: You are speaking of 1921, this year?

Mr. Balmer: Yes.

Mr. Horan: During that period of limited operation by both of these concerns they have presented a cost bill for the replacing of sills, end sills and splices to decking amounting to $9,290.60, and replacing of brake staffs, grab irons, and sill steps amounting to approximately a little over one thousand dollars.

A. Well, as I say, we only ship logs during nine months of that period; five days in June and four days in October.

Q. 179 brake wheels and 57 brake staffs. Now I would like to have you tell the commission a little more fully the method of operation of these log trains over the Great Northern Railroad from your camp and also from Mr. Irving's camp, where they were operating in connection especially with reference to the cheapness of the character of this service from the railroad standpoint?

[fol. 1078] A. Well, I think I have in my testimony yesterday fully related how the train is made up on our connection, the side tracks, the yard tracks at Goldbar—that I went into I think pretty fully, stating to the commission that we carefully inspected the brakes after the cars were coupled up by the Great Northern out at that end of the line, our plan was to stick the caboose past the end of the switch on the main line, past the part of our switch, hook onto the train of logs and come out and hitch on the caboose to the train and get ready to go. No other switching or spotting. It is an easy water grade. As a matter of fact, down hill, I will say all the way to Everett the railroad follows the grade of the Skykomish river. When the logs arrive in Everett——

Q. There is no switching done at any intermediate points on that train?

A. No, not that I know of. They may have to take a siding to pass another train east bound. But I suppose that depends upon the density of the traffic. When they arrive at Everett, all they have to do is to set the entire train as far as our logs are concerned upon the dump tracks of the Weyerhauser Timber Company and the labor ends there. That is about all the movements consist of. The character of the equipment in the logging service is a very cheap equipment. The cheapest rolling stock that the railroad had. I know about the cost for I bought some flat cars and I just bought [fol. 1079] some centre dump gravel cars, and we have equipment of our own. I am just trying to buy a few box cars for house cars for the men, and I discovered that the box cars only cost about one half as much as a flat car and one third as much as a gravel car, so the equipment is undoubtedly the cheapest rolling stock. It has already been testified to by one of the witnesses that they used old type locomotives for handling the train because they have no difficult grades over which to move these logs or to move the returning empties.

Mr. Balmer: What did you say you paid for the flats you bought, a while ago?

A. I bought two flat cars in Portland a week ago Monday, 34 foot, 60,000 lb. flat cars, made with M. C. B., with I. C. C. requirements, for $320.00 a piece.

Sup. Spinning: Are these new cars?

A. No, they are used cars, but none of the cars in the logging service that were turned over to me and had turtle back bunks placed on them were new cars, on the contrary they were pretty badly used and worn. The cars I bought in Portland were just as good cars as the cars upon which my bunks were placed, except that these log cars are larger, heavier capacity, and a longer car and heavier capacity than the ones I bought in Portland.

Supervisor Spinning: Do you know the price of these cars new?

A. Why, it would be pretty hard for me to say, to price. I used to know the price and at the time these cars were bought to the best of my recollection they were worth about $780 per car, and I [fol. 1080] think Mr. McDonough and Mr. McCaustland when examined in a former hearing testified they cost $780.00. That is my recollection of it.

Mr. Horan: During what period of time since you commenced operations at Goldbar has the Great Northern operated a solid log train over that portion of the line?

A. We started the operation of three sides in our camps about the first week in May of 1920, I cannot be exact as to the date, I might not be within ten days of it. The car situation was a very trying one. We had a constant car shortage. I went to the Great Northern office and to Mr. McDonough's office in Everett and there I accidentally ran on to Mr. Irving of the Sultan Railway & Timber Company who was evidently there on the same mission that I was on; namely, to see if we could not coax them to let us have a few more cars—to give us better service. But while there we agreed—I have forgotten, perhaps Mr. O'Neill and perhaps Mr. Elliott was there at that time, and I think maybe both of them, and it may have been on another occasion that I met Mr. Irving there, but in all events we agreed that if the Great Northern would put a train exclusively in our service we would take our logs out in the evening, after the day's work in the logging camps was done; and that we would see to it that the logs dumps were operated at night, because we could unload the cars at night and save keeping them over in the yard during the daylight hours, when we could work in the woods, and those cars could be hauled back at night and ready to be loaded the next day, so that they would get a continuous 24 hour service of the car, the cars would be loaded each succeeding day and run back at [fol. 1081] night. That arrangement was put into effect and during the rest of the summer of 1920 the Weyerhauser dump was operated at night for the express purpose of facilitating the movement of cars and in order to bring that about I was forced to pay the wages of the night crew on that dump in addition to the railway charge of 50 cents per 1,000 for the Weyerhauser people, that they were making for the use of the dump that I had used at an additional cost to me of from $350 to $400 per month. Mr. Irving, I understand from his own statement, and my observation also operated his logs at night during that period, that is, during the portion of that period that Mr. Irving only operated his logging camps for about six weeks. However, that is the arrangement that went into effect, but he closed his camp about the middle of June and didn't resume operation in those camps again until about the middle of September of the following year—of this year. The logging trains ran exclusively handling logs during the period of time Mr. Irving's camps were operating, perhaps six weeks, maybe a week or two longer. I wouldn't be positive about that; but the log train schedule was kept in effect after Mr. Irving's operations ceased; and after that for a time I ceased to run at night, because even with that arrange-

ment I found I was unable to operate to full capacity the three sides because of failure to get cars to keep my crews busy. But after that while the log scale schedule was kept up those logs were tacked on [fol. 1082] to the tail end of a mixed freight train and were hauled down to Everett at the tail end of a mixed train. I wouldn't begin to tell you how many cars but I would say from 75 and sometimes nearly a hundred cars. Sometimes that train looked to me to be nearly a mile long, and in talking with the agent of the Great Northern R. R. and with the train men who had the operation of that train—in other words, the conductor of the train himself—they told me that that so called log train took freight from Gold Bar—all of the freight from Gold Bar destined for Everett and points on the Great Northern north of Everett, so that only during a very short period of time we have been logging has there been a train maintained exclusively in the service of the two logging companies operating on the main line of the Great Northern east of Everett. The rest of the time our logs, and that was from my personal observation, and I saw the train repeatedly, the logs constituted from 25 to perhaps 33⅓% of the total car movement of the train in which the logs were hauled. During our operations in this year of 1921 our logs are handled and our empties brought back by the regular freight train.

Mr. Horan: Have you any knowledge as to the number of cars or other freight which comprises that train on its return trip taking in your empties?

A. Yes, the train that brings the empties back comes back—when it came back it was a mixed train, except during the period we spoke of, when Mr. Irving and I were both operating, and which I [fol. 1083] think didn't extend over six weeks from the time we made the arrangement for the night dumping—even after continuing the night service down there because this train of which I speak, they hauled my logs into Everett, the northbound freight, maintaining the log train schedule.

Q. Then it is your understanding of the practise of the railroad company that the west bound freight trains, through freight, is broken up at Goldbar and all freight cars that were destined for Everett and points north were attached to your log train and taken on to Everett?

A. Well, I was told by the station agent at Goldbar and by the conductor that moved the train.

Q. The balance of the cars in that west bound freight were made up into another train and sent through the tunnel in Everett to Seattle and points south?

A. That is what I understand. And I might suggest that the Great Northern R. R. Co. can easily supply their records; their records will show just what happened, and I don't think they will deny the condition at all.

Mr. Balmer: We will admit that the records when supplied will be more reliable than your testimony taken from isolated instances in those divisions.

A. Yes, I would think it ought to be, as I think my testimony is from my personal observation, and from my talks with the station agent at Goldbar and with the conductor that operated that train. Naturally I was interested.

[fol. 1084] Mr. Horan: Now Mr. Frost what was the rate per thousand feet of logs which you have paid, I believe you have three rates, just tell the commission what that rate was, or what the rates are, or were?

A. I may not be able to give those for the present year but during the year 1920, as I say, our operations began—I stated yesterday that perhaps the 28th day of January—I see from this statement that we loaded our first logs on the 26th day of January 1920. I will look through these reports as to 1921. From January 26th to August 26th when the 25% increase went into effect, we shipped 1,779 cars of logs upon which we paid $22,602.20 in freight charges. The cars actually contained 10,562,234 feet, board measure. If my calculations are right that made our freight cost say $2.14 per thousand feet board measure, while the rate was $1.81½. From August 26th to December 10th, 1920 we shipped 879 cars on which we paid $13,967.31, the cars containing 5,297,260 feet, board measure of logs, and that made the rate per 1,000 feet that we have paid on logs $2.63, while the named rates in the tariff were $2.27.

Mr. Turnburke: What period was that?

A. August 26th to December 10th when we ceased operation, and this was gotten out from my own information and I have here the tariff, each car shipped, the number of logs on the car and the number of feet on each car for each day.

Mr. Horan: Now I wish you would explain the reason for that [fol. 1085] variation in the rate actually paid and the rate in the schedu[illegible].

Mr. Frost: The reason for that is that we are required to pay on a minimum of 7,000 feet, and we find it impossible to always load to the 7,000 foot minimum. That is particularly true of small timber, and our timber holdings up there consist of a stand, that is, while I won't say almost exclusively fir, but it is a very solid stand of small and medium growth timber with a small percentage of cedar and a very small percentage of hemlock, and we find that when we undertake to reach this minimum of 700 feet with small logs, owing to the number of them on the car that we are unable to do it, or else we build it up to a very unsafe load. Where the logs are larger and scale more for logs we have no trouble at all in reaching the 7,000 foot minimum with a very fine and a very safe load. But in instances where you put as we do here 14 to 16 logs to a car—there are 16 log loads (indicating) on which we have 4,588 feet, 4,792 feet, 3,883 feet, 4,645 feet——

Sup. Spinning: How many logs on that car?

A. 16 logs on each one of them.

Sup. Spinning: And were they the length of the car?

A. Yes, those logs will be cut—well perhaps I had better stop and explain that in view of this question. Logs are cut of standard

lengths, usually 32 and 40 feet, with a small percentage of 36-foot long when you are asked for them by the log buyer; but in many instances the tree will not measure out so as to make units of 40 or 32 feet and consequently we may get some 28 foot logs or 24 foot logs, but a very small percentage of them. And then again in felling trees, [fol. 1086] very frequently owing to the character of the ground, the inequalities in it in falling the tree will break, and in that instance we take out or cut out the broken piece in the middle and that interfered with getting the standard length of 32, 36 or 40 feet; so that if you do have a number of short logs and a number of what we might call off-length logs in the way of 28 or maybe 38, as the case may be, we try and save all of the merchantable timber that we can. A large percentage of the logs are 32 and 40 feet with a sprinkling of 36 feet in them. During a portion of the run last year I got a great number of 42 foot logs at the special request of the people to whom I was selling my output.

Now on the other hand when we can get logs of a good size we have no trouble at all in getting the minimum load on the car. Then another thing that influenced the loading of cars too, was the fact that last year the cars were handled so slowly that the cars that were loaded with logs were often times out of the woods from four to five or six days before they come back, and we started in with 76 Great Northern flat cars equipped with steel bunks, but it is safe to say that more than 50 per cent of the cars we loaded during 1920 were ordinary flat cars upon which we used the wooden stakes, and the wooden stake cars will not permit the same load that can be put on the steel bunk. I would say off hand, that it is easily possible to get from 500 to 750 feet more logs scaled on the steel bunks than it is possible to load on a car with the wooden stakes; and that fact that many of [fol. 1087] these cars were loaded as wooden stakes, or were wooden stake cars, perhaps accounts for the small load; but if I may make an argument here—and it seems to me this testimony is much in the nature of an argument, I should like to suggest that the proper way to solve this minimum load is to make a daily minimum or a train average minimum, or something of that sort, and I will tell my reason for that. In order to obviate this excess freight payment—and last year we paid the Great Northern R. R. $5,446.97 in excess freight, in order to obviate that heavy expense to the shippers by reason of this minimum we are constantly undertaking to build up loads of logs that cannot be safely loaded to the minimum of 7,000 feet, and we are sending down over our own roads and down over the common carrier roads loads that are unsafe, where if that minimum was reduced to train average minimum or a shipment minimum we can frequently put perhaps 4,500 feet on one car and maybe 14,000 ft. on the next car because of the character of the logs; and my suggestion would be that if I send out a shipment of 20 cars and those cars average more than 7,000 feet that I pay on the actual logs shipped. If they average under the 7,000 feet that I pay for the 7,000 feet. And I make that suggestion to the shippers for their consideration, because there is no question but our unsafe loads, putting loads on that are composed of logs that cannot be safely loaded

to the minimum, and in that connection also I would like to call attention to what seems to me to be the reason for establishing a minimum load of any commodity. The minimum is established for the purpose of inducing or compelling the shipper to load the car to a [fol. 1088] reasonable capacity and a minimum load should only apply where the shipper has it within his power, where he can if he so desires load to the minimum. But in the shipment of logs the carrier railroads are endeavoring to penalize and do penalize the shipper for the condition over which he has no control, absolutely none. The physical condition surrounding his business, the character of the logs themselves are such that no matter how much of a penalty you impose upon him he cannot reach that minimum, it is not within his control; and you are penalizing him under this process for something that he cannot help, he cannot avoid, and in his endeavor to avoid that he is turning over to a common carrier railroad loads that are not the safest loads to move.

Mr. Henderson: Does that also result in some timber being left in the woods that would otherwise be brought out?

A. It results to a large extent in leaving unusual small logs. You have only to go up into the old log woods to see the small logs. We cannot begin to load to the minimum and we say "never mind, the freight will cost us $4.00 per thousand on that and we can't afford to take it out"; that happens right along and it results in an economic waste as well.

Supervisor Spinning: The expense of handling this timber to the car in loading, which has the greater cost, the small timber or the large timber?

A. Well, that is a difficult question to answer without discussing the logs and logging conditions.

Sup. Spinning: Well, take the topography and the density of the timber and all just the same——

[fol. 1089] A. You rarely get the same density of stand where you get the good sized timber that you do where you get the small timber. The question of cost of getting it out and loading it depends very largely upon the topography, but this I will say that in loading the logs it does not take any longer to place upon the car a log containing 5,000 feet, and the same expenditure of time and labor, than it does to put one on the car that only contains 500 feet. In yarding logs out of the woods, however, we would perhaps in yarding the log containing 5,000 feet yard in only one log at a time, where if we had logs as we do, and I have logs for more than a year in timber that contained an average of less than 5,000 feet—in yarding logs of that kind we would bring in three logs at a trip, perhaps 1,500 feet, as against 5,000 feet in a single log. The character of the ground and the density of the stand being the same, the large logs can be yarded and loaded very much more easily than the small timber.

Supervisor Cleland: What is the present rule with reference to the charge on a minimum of a car loaded with more than a minimum of 7,000 feet, you always pay the minimum of 7,000 feet?

A. We pay the minimum of 7,000 feet on the car, no matter if the car only contains 3,000 feet, but if the car contains 1,000 feet over 7,000 feet we pay for the entire contents of the car.

Supervisor Cleland: Now I understood you recommended the rule on minimums—that you made an average on the shipments——

A. I made it a train average, or a shipment average. For instance, if I should ship 20 cars of logs a day and some of those cars had 4,500 feet on and some of them 10,000, 11,000 or 12,000, as they frequently do, and that 20 cars averaged 140,000 feet, the total [fol. 1090] shipment has 140,000 feet on it, then I should not be penalized for a minimum because my whole trainload will average 7,000 feet to a car.

Sup. Spinning: What if it is above?

A. If it is above then pay upon the total scale, if the 20 cars containing an average of 8,000, we pay upon the scale; but where the scale falls below an average of 7,000 minimum why charge us for the 7,000. We are perfectly willing to do that, at least I am, because I think I can obtain an average of 7,000 feet; but I dislike to pay for the few cars that go out every day that we cannot possibly load to the minimum from no fault of ours.

Supervisor Cleland: Would you in that rule make a minimum number of cars?

A. Oh, I don't believe I would, I would make a daily shipment. That would satisfy me very well indeed.

Supervisor Cleland: Suppose you send out two cars?

A. Well, if the two cars are below, make us pay the minimum.

Mr. Henderson: Your idea being that the shipments as offered at any one particular time should average 7,000. If it goes over that you pay what it actually scaled and if it goes under that you pay the 7,000?

A. Yes.

Mr. Henderson: Is that clear?

Supervisor Cleland: And would you recommend any change in the present minimum for a single car shipment?

A. No, I don't believe I would. I think, as a matter of fact, there are very few single car shipments of logs. If anyone is logging at [fol. 1091] all they usually have one side at work and that will always mean from five to ten or 15 cars.

Mr. Balmer: Have your shipments as a whole averaged over or under the minimum?

A. I think so far this year our shipments have averaged—and this year we have had the exclusive use of the turtle back bunks—I think so far this year they have averaged over the minimum.

Mr. Henderson: If you will give me the figures we will get to what your average is——

A. That was last year when I was using a whole lot of open faced cars. We averaged 7,063 feet to the car in April of this year. In May of this year our average shipment was 7,059 feet, and in June of this year our average load was 6,894 feet. One side averaged 7,131 feet and the other side averaged 6,716 feet, making the total average 6,894 feet; but one side was working on logs that averaged

689 feet to the log and they got an average of more than 7,000 feet; the other side was working in logs that averaged only 628 feet to the log or 60 feet per log less and they were unable to obtain the minimum.

Supervisor Spinning: Now does the market value of your timber in any way affect the size of the timber?

A. Yes. We will have to go into that somewhat in detail in order to answer that question; let me go back and tell the story. The Pacific Northwest, and by that I embrace Oregon and the Columbia River district and all of western portion of the state of Washington [fol. 1092] and British Columbia, is perhaps the only locality in the whole world where saw logs are a commodity that are bought and sold in the open market just the same as wheat or hay or grain or potatoes. It is safe to say that in the Puget Sound district there are not 50% of the manufacturers engaged in the manufacture of lumber that own a stick of standing timber. 50% of your saw mills and shingle mills that are manufacturing lumber and shingles on Puget Sound don't own any standing timber at all, but they buy the raw material in the form of logs in the open market. Lumber is graded and shingles also and to various grades. The highest priced lumber, being the clear lumber, the character of the lumber you see in the finishing of this room, that lumber is graded into various grades down until you get the rough knotty boards that can perhaps be used only in the roughest kind of construction for temporary buildings or concrete forms, or perhaps cut up and put into boxes, making the inferior class of boxes. The large tree is the only one that contains the clear lumber. When the trees grow in the forest they start with a thick mass of growth and they start with limbs almost from the ground to the top of that little tree. As the years speed on they vie with each other in endeavoring to reach their heads into the sunlight, the air. The result of it is that from year to year those limbs drop off the tree and ultimately a great proportion of them die and fall to fertilize the ground upon which the other trees grow; but that constitutes a pruning process. The scars that are left of those limbs that fall off the tree in that process eventually heal as the wound heals in the skin of a human being, and as the years roll on those scars heal and also a [fol. 1093] new growth of wood is placed around that scar and that knot is still perhaps imbedded in the heart of the tree, and the older the growth of the tree the longer the time since that pruning process, and that wound upon the tree by reason of that limb falling off. The more clear lumber absolutely free from knots is right on the surface of the tree and the result of it is the tree that makes this beautiful clear lumber we see here in the panels and in the doors—that lumber sells for a very much higher price than the lower lumber and the result of it is that the logs are classified by the manufacturing industry of Puget Sound to a certain extent and the gravity becomes specialized. Now for instance, the Weyerhauser Timber Company, Mill B, to which I ship or sell my logs, are specializing in timber and timber sticks and all that sort of stuff that requires knotless clear growth, or an old growth, or a mixed

or clear lumber, but the log that is strong and resilient that will make car sills and all that sort of thing; while Mr. Watson who, by the way, is one of my associates and is president of the Wallace Falls Timber Company has a saw mill that is specializing in cutting clear grades of lumber. Now the result of that is a demand on the part of the manufacturer for the sorting of these logs; while Samuel Osgood in Tacoma manufactures doors and so forth, will require a clear, high grade clear log. Mr. Weldon of the Weldon Lumber Company, who is manufacturing that heavy growth lumber, or heavy grade lumber, is able to pay a high price; and out of that has grown and has been established for a number of years a grading of logs into three classes as far as fir is concerned. The [fol. 1094] logs are graded into No. 1, No. 2 and No. 3 logs. The number one log is 32 feet in length, but measures at least 30 inches in diameter at the small end. It cannot grade #1 no matter how fine and clear it is unless it is 32″ in diameter and it must cut absolutely clear lumber in order to make that grade. The #2 logs may be a log characteristically as smooth and fine as the No. 1, but it doesn't measure quite up to 70″ and this is a log that must cut at least 50% of clear lumber, and it must not be below a diameter of about 15″. All other logs capable of making lumber are graded as #3 and in the market are sold at different prices. Today my logs are being sold for 10, 15 and 20 dollars. I am getting ten dollars per thousand for part of the logs, 15 dollars per M for #2 logs and $20 per M for #1 logs. Now that applies to fir. Hemlock—it has been the endeavor of the mills and some of the loggers to grade Hemlock but they have not gotten further than an attempt. From time to time, Hemlock has been graded into one and two. The demand for Hemlock is so small and the hemlock log is so difficult to dispose of that these grading rules break down and the logger does anything in the world that he can to get rid of it, and it really has no established price or grade at the present time. Now cedar is also graded, but that is only a recent thing within the last year and a half or perhaps two years that they have undertaken to grade cedar. There has grown up a demand for Cedar lumber, a demand in the east for cedar siding and cedar lumber, and a log that will readily cut shingles, that is full of knots and has a hollow-butted and irregular shape, does not *not* cut the clear grade and [fol. 1095] smooth cedar like long lumber and the result of it was they started to grade lumber into clear cedar and shingle cedar, but the distinction is not drawn as regards fir in the market by establishing different prices for #1, 2 and 3; and in scaling cedar the scalers figure out the amount of lumber and shingle timber in it and they certify the raft as containing 10% to 15 or 20 or 25 per cent lumber cedar, and the result of it is that the selling price of that cedar is based upon the percentage of lumber cedar that is contained in that tow or raft.

Mr. Henderson: I would like now——

A. I am all through with describing the method of grading and marking.

Q. Now what per cent of No. 1 would your logs run, approximately, I mean?

A. My logs?

Q. Yes.

A. About 7 per cent.

Q. And No. 2.

A. I can give it to you exactly.

Q. Just for the purpose of illustration is all I mean, and approximate.

Mr. Balmer: In the answer you gave, were you speaking*ing* of what you were getting at the present time, or of your timber holdings?

A. Well, what I am getting at the present time is characteristic of our entire holdings in that vicinity.

Mr. Henderson: What I wanted to get at, we can get it—those percentages is this—those cars that you loaded probably 16 logs, [fol. 1096] those are probably your lowest grade?

A. Yes.

Q. And those are the cars that you cannot load to the limit?

A. Yes, those small loads are uniformly #3 logs and hemlock; that is, applying to my own tract. However, where you have any considerable percentage of cedar—very frequently you get an underload in the rough and broken cedar——

Q. Then even if what you say is true, you are paying the highest freight rate on the lowest grade and cheapest price lumber?

A. Yes, that always occurs.

Q. Now can you get 14,000 feet on a car; you spoke of 14,000 feet per car awhile ago?

A. Yes if we can get three logs that will scale 5,000 feet apiece and can put them on, three logs on a car, and make a nice load.

Q. But that would be an extraordinary load?

A. No, certainly not.

Q. I mean it would be extraordinary for you to get those kind of logs?

A. Yes; and I get them very frequently. There may be three cars going out of my camp at a time.

Mr. Horan: What percentage of No. 2 logs are you hauling, approximately?

A. I am sorry I have not my figures on my logs up there. The timber that I am shipping—the timber will run about 3% cedar, 3% Hemlock, 7% No. 1, approximately 60% No. 2, and the balance of it No. 3. That is off hand—I couldn't give you the figures ex- [fol. 1097] actly, but unfortunately I have not the 1921 report.

Mr. Horan: What percentage of that would be lumber—cedar?

A. None of it. We are not in the cedar country.

Mr. Dudley: Going back to the question of the amount of timber you can load on a car, it depends somewhat on the facility that you use in keeping the load on the car. For example, if you use chains you can put on a much heavier load than you can on big timbers?

A. Well, you can only use chains on the loads when you use high stakes. It is necessary to put in high stakes as you would put them in for a load of telephone poles or cordwood, and then you can chain across. That is something that greatly delays the operation of loading and unloading your car. It is almost impossible to load cars with any degree of efficiency or any degree of speed with the high stakes that you use in loading telephone poles, and that is the only way you can successfully use the chain and make the chain mean anything.

Q. The Idaho timber is much smaller than it is on Puget Sound is it not?

A. Yes sir.

Q. And there they have a minimum of 8,000 feet by using chains?

A. Yes, but the trouble of trying to use chains here is as I have just illustrated. To take out the large logs and you can pick them up and drop them inside the high stakes. You cannot handle them [fol. 1098] as you do toothpicks and telephone poles. We have a certain percentage of these small logs and you never would know when the logs were coming in, you would not be prepared with the chains, to undertake to chain the big logs would be a very tedious and expensive operation.

Mr. Dudley: You are referring to the small logs in the timber and those would be accumulated and could be handled together and loaded out with chains.

A. It is absolutely impossible to accumulate logs in the logging operations in the woods. You have to load them on the cars first to accumulate them because you cannot let them lay under your spar tree. You cannot let them lay in the woods if you have your rigging strung I don't know any place to accumulate them, you have to get them on the cars and accumulate them as we are doing.

Q. Your scale is the scale of merchantable timber in the logs?

A. Yes sir.

Q. And that uniformly represents the quantity of the timber in the logs?

A. Yes.

Q. There is frequently a large amount of waste lumber in the logs?

A. Oh, there may be yes.

Q. So that a log that scales 7,000 feet may have, so far as the total quantity of material in it, the same material as in other logs that scale 5,000 feet?

A. Hardly that, because we couldn't afford to haul that kind of [fol. 1099] timber out of the woods; it is too expensive, loaded logs, to load old hollow-butts and take up room on the car of crooked logs, or logs, for instance, with defects in them or may be logs with some rot in them that are not included in the scale.

Q. In scaling the logs from what point do you measure, some point inside of the bark do you not?

A. The logs are measured at the small end of the log unless they are long logs, and the scaler makes allowance for any defects or hollow buts or anything that there may be in the log.

Q. But he doesn't measure clear to the bark, he measures inside of the bark?

A. Yes, he measures inside of the bark and the railroads haul the bark, you don't get any pay for that.

Q. And doesn't he also leave a certain space inside of the bark?

A. He does not if I know it, not with my logs anyway; and we ride herd on them all the time in order to see that I have a proper scale of my logs, and that the mill man don't sul si lize the scaler and get the best. No I scale every log that goes ou of the woods myself, and I take the diameter and the length and grade and character of it and if there is any defect in that log I have the scaler make a note that he check *soe* 3 or 4 hundred feet, because I don't intend——

Mr. Dudley:

Q. But the railway company is required to transport the bark and defects and all that, which is not covered by your scale without compensation?

A. Yes, and not only that, the railroad companies take our log [fol. 1100] flats and use them as scavenger cars and load them up with tin cans and refuse, drop down to their right of way, and ship them into the woods for us to clean up. It is about an equal break, but Mr. Dudley you would not contend would you that when railroads name a rate per thousand feet board measure that you will attempt to change the term per thousand feet board measure from the acceptation that is used by lumbermen and loggers that are engaged in the business and that has been frequently construed by the courts?

Mr. Dudley: No, but I would suggest that where that is covered that the cost of the railroad company that should be taken into consideration in making rates.

Mr. Henderson: They don't weigh in your cars and weigh them out like when they are shipping by weight, do they?

A. No, they save all the weighing and the delay in weighing them. I don't think there is anything in that.

Mr. Horan: You don't get anything for the bark do you?

A. No we don't get anything for the bark any more than you do for the hole in the doughnut.

The Director: We will take a recess for five minutes.

After Recess

All parties present as before.

Mr. Frost on stand.

Mr. Dudley:

Q. Is there any fixed, or substantially fixed per cent of merchantable material in the logs you buy before the log is shipped?

A. It would be hard for me to tell you what a cull log is.

[fol. 1101] Q. I mean that the manufacturer, the mill man, who receives the log, will he require a certain percentage of merchantable timber in it?

A. Yes.

Q. What is that?

A. I would not be prepared to tell you now whether a log would be considered merchantable timber or not—that is something that is up to the individual scaler. We ship logs that are scaled by ourselves only, and an examination might show that that log has cocky spots in it, and it goes into the mill and doesn't manufacture anything, but a log that does not contain a substantial amount, at least 75 per cent of merchantable timber, would not be hauled out of the woods.

Q. But a log that would contain 75% *per cent* of merchantable timber, would you haul that out?

A. Yes. But where we would get a log on the landing—that is, this is the condition, we use wood for fuel in our donkey engine, a considerable amount of it; a yarding engine will burn 1,000 feet of timber per day, that is on a side. We use a considerable amount of fuel in our camps also, which accommodates better than 200 men, and we keep them hot, and now when we get a defective log on the landing we select that log for a fuel log, no matter it may be 50% only defective. You have to have some good wood in the log to make that fuel, and when we run across those they are used for fuel in the camp and for firing our engines. There is not much of that in the ordinary operation, it is a negligible quantity.

[fol. 1102] Mr. Horan: Since the recess have you any further information with reference to the operation of Mr. Irving's camp in 1921?

A. Yes, I want to correct my statement concerning that matter. Mr. Irving did run during—about the same period of time I did in the spring of this year; he quit a little earlier than I did, but Mr. Irving was under the impression that he didn't run and so was I, but he just received a telegram that he did, and I want to say that I was mistaken about it. But he didn't run however until the 1st of September after closing down sometime about the 12th or 15th of June.

Q. Now you have been in the logging business how long?

A. Since the 1st of March 1913, that would be about 8½ years.

Q. Are you prepared to state what profits you realized in the conduct of that logging business since that time?

Mr. Da Ponte: I object to that, I think we ought to have access to their books.

Mr. Horan: He didn't get access to your books.

Mr. Da Ponte: Wait a minute, I want to make an objection. Unless we are given access to the books to see how these so-called profits are computed——

The Director: The objection is overruled.

A. Yes, I can give you the exact figures of the profits of the Cedar Lake Logging Company of which I was the general manager that operated in the vicinity of Cedar Falls and shipped over the Mil- [fol. 1103] waukee railroad for a period of 6½ or 7 years. Our operations began very late in 1913, that is, the shipment of logs. For a small period in 1913 to December 31st 1914, embracing a little more than a year, we logged 50,653,408 feet of logs. The average price we received per thousand feet for those logs was $7.29.

Mr. Da Ponte: What year was that?

A. (Continuing:) and $7.29, or to carry it out $7.293. Our profit in the operation for that period was 31.66 cents. I have the cost of logging in detail if you care to hear it. I have the cost of logging showing the supply used in logging, the locomotive supplies, cost of oils, tools, blacksmith, costs, wire ropes, the labor of piling and stacking, the labor of yarding and loading, miscellaneous labor, labor in the blacksmith shop, railroad operations, repairs necessitated, the railroad labor, and the cost of maintaining our railroad, the cost of supplies, the rent on the log dump, the labor cost of the log dump, the cost of scaling, the cost of towage, discount, interest, expenses, general expenses, and office expenses, and stumpage and freight.

Q. What period is that?

A. That covers the period of 1913 and all of 1914 that I began logging operations.

Mr. Henderson: Did you say 31 per cent or 31 cents?

A. 31.66 cents per thousand feet. For the year 1915 our operations consisted of two operations, one of them we were logging a tract of timber that belonged to the Weyerhauser Timber Company [fol. 1104] under a contract to take the logs out of the woods, load them on the cars and deliver them to Cedar Falls. We put in for them 24,135,370 feet, and on that operation—we made a profit on that contract of 77.33 cents per M feet. In our own operations in our own timber we put in 9,285,114 feet and we made a loss of 35.29 per thousand feet.

Mr. Da Ponte: What was your sales price that year?

A. Our sales price for the logs that we took out that year averaged us $7.1913 per thousand feet.

Q. What were the prices for 1st, 2nd and 3rd grade?

A. The prices that year, in 1915, perhaps would range about $6.00 $9.00 and $12.00, with cedar running about ten dollars, and hemlock about $5.00 per thousand; that is the best of my recollection. I have not the individual prices. And the prices at that time were falling, they were selling the logs for what they could get for them; you might shave the price 10, 15 or 20 cents in order to get rid of a tow of logs, in order to get enough money to meet the payrolls, and the next time you might get a little more, but I would say that was the average. Now taking our operations at Cedar Falls from the beginning in 1913 to January 1st, 1917——

Mr. Balmer: You have not read the figures for 1916 have you?

A. I don't know whether I have the 1916 statement here or not.

No I have not. I might say to you that the Cedar Lake Logging Company is out of business, it has been absorbed, and these statements are the statements that were prepared at the time and on the grounds. They are cost statements and in my business I make a [fol. 1105] full detail and itemized cost statement of the cost of every single department on the logging expense, and that is kept right up to date, and given to me every month, and the purpose of that is not for the trying of these suits or for statistical information but to enable me to keep my thumb on my business and know where the logs are, and spot them if it is necessary, and these were prepared for that purpose, and this is the annual statement that grows out of that, and we keep all of our cost statements that way; otherwise, we would not log for long. And in order to show the operation my bookkeeper prepares for me at the close of 1917 a statement embracing all of our operations up to that time, and this is the statement prepared at that time that I have preserved in my private office. That covers 1913, 1914, 1915, 1916, to January 1st 1917.

Q. Is that going to be filed as an exhibit?

A. No, it is the only one I have. It is a historical summary. You can copy it if you wish. I have no objection.

Mr. Dudley: I think, if the commission please, that the witness should be directed to make the necessary copies and have them made and filed as exhibits with his computations. They cannot be carried in mind, and in view of the fact that the commission requires the carriers to prepare 33 exhibits of statistical data I think the commission ought to require this to be done.

Mr. Henderson: The carriers introduced several of those kind of things and I have never seen any of them. If he wants to file them, all right.

[fol. 1106] Mr. Da Ponte: We have filed a barrel full of stuff here.

A. I am perfectly willing.

Mr. Dudley: We ask that he file it in the records as exhibits.

A. I will makes copies. Now you must understand, as I have explained, that we had timber purchases of our own, of our own stumpage, and that we logged some timber under contract for the Weyerhauser Timber Company; during the years 1913, 14, 15 and 16 we logged the timber that we had purchased from the City of Seattle, some 71,224,000 feet, for which we received an average price of $7.3224 per M feet. On that operation we realized a profit of 22.73 cents per M feet. Now we had a contract with the Weyerhauser Timber Company for taking off timber that belonged to them and delivering it at Cedar Falls, they paying the freight, and on that logging contract we put in 51,811,530 feet and we made a profit of 25.06 cents per M feet. I would like to say that during the greatest period of this operation we were working our logs and the logs were being shipped from Cedar Falls to Everett to the same dump we are now dumping. But when the Weyerhauser Mill B was constructed on the river they were desirous of obtaining logs that could be delivered direct to their mills so as to obviate the tow up the river under adverse conditions that would be required

of them provided they got their log supply in the salt water, so I agreed when that mill started that if they would pay me full [fol. 1107] market price for my logs they could have the entire output with the exception of the logs which were shipped to Ellensburg, and during that time we shipped logs over the mountains to the mill in Ellensburg, the rest of them going to the new Weyerhauser mill. For a portion of that time we shipped to Seattle. The log rates to Seattle being $1.60, the log rate to Everett, and which covers the major portion of this operation was $1.40, with a minimum of 6,500 feet. That was the rate established by the Milwaukee. The haul from Cedar Falls to Everett, to the Weyerhauser dump, is approximately 58 miles, or maybe 58 miles and a fraction, and I may stand corrected on that.

Mr. Dudley: I think it is about 55.

A. I understood it to be 58. Now the logs that were shipped to Ellensburg which was across the mountains in eastern Washinton, I had a constant supply of them going over to run a mill in Ellensburg. Those logs were sold f. o. b. the car at Cedar Falls. We didn't pay the freight, but in the distribution of the freight charges we figured the freight that we actually paid as against the entire logs output, and we figured that price we received for the logs that we sold on board the cars at Cedar Falls with the purchaser paying the freight, in fixing this average so that this average price is perhaps not the average price we would have received in Puget Sound because we sold them at Cedar Falls for a lesser price than we sold the logs on which we paid the freight and dumping, and rafting charges on Puget Sound, so that possibly makes our freight a little lower than the average cost of logs. Since this is going to [fol. 1108] be filed I think it will disclose that the freight that we paid amounted to $1.299. But understand that that total amount of freight we paid was distributed over our total output and a considerable portion of our output we paid no freight on at all, and that affects the freight charge as shown by this statement, and also affects the sales price on the logs we sold to Ellensburg. That is the correct exhibit of our operation. Now this gives a fair summary of the logging business in normal times. In 1917 things perhaps became influenced by conditions in Europe and the war, and in 1917, and I would say that I inaugurated the practise of keeping an account with each separate tract of timber that we bought in order to tell what our varying profits and losses were on those particular tracts, instead of lumping them altogether.

Sup. Spinning: What rate of return did you allow yourself?

A. We didn't allow anything.

Q. Did you allow anything for interest on your investment?

A. Not a thing. I might say in explanation of this operation at Cedar Falls that up to 1917, which is characteristic, we paid for our timber on a log scale basis. Our primary purchase up there was from the city of Seattle, a tract of approximately 100 million feet, and we paid with that log scale on the 10th of the month following its removal, and we paid no taxes on that timber, and that is all of the timber in 1917, we didn't pay any taxes on it or any interest on it,

[fol. 1109] and there is no interest charge and no taxes and practically no overhead embracing that. It is a characteristic log operation where the logger goes out and wades into the timber and pays for it as he cuts it off, and that is what we did in this operation. So the city of Seattle was carrying the taxes on this stumpage and there is no interest in there, except perhaps—well, in that whole statement there there is an interest charge of .19 of one cent per thousand feet, about 1/5th of one cent per thousand feet, and that was because we borrowed a little money from time to time from the bank to meet a payroll, so that I think that describes the characteristic condition without taking into consideration any capital investment, excepting capital investment that was required to build our railroad and to equip our logging camps.

Mr. Balmer: Do these figures include anything to cover salaries of corporate officers?

A. The only salary that was paid any corporate officer was paid to the manager of the corporation. He lives in the woods and conducts the logging operations. No salaries were paid to any trustees for attending meetin-s which they rarely did. I think maybe there period of 2½ years when there were no meetings of the trustees, and it was a characteristic one man operation, you could not get them together.

Mr. Henderson: And you didn't need a lawyer?

A. We didn't have any and no legal expense during that period, and the manager of the company even prepared the articles of incorporation, as he did for the Wallace Falls Timber Co.

[fol. 1110] Q. Who is the manager?

A. I might say to you that the manager was not drawing an exorbitant salary, during most of these years he was drawing from three to four thousand dollars a year.

Q. What makes you think that is not exorbitant?

A. Well, I think I earn that all, I was on the job night and day.

Mr. Henderson: We didn't ask any of the other side what those fellows were receiving?

A. No. This shows in detail the logging operations in 1917 and 1918, we were working perhaps under unusual conditions. In 1917 we bought a tract of timber from the Northern Pacific Railroad up there, and the logs we cut off the Northern Pacific tract we were able to sell for $8.2088 per M feet. Another tract of timber we bought from Weaver Bros. of Spokane, and those logs, during the same period of time averaged us $11.848. That was just the difference in the quality and the grade of the timber we produced, that produced that difference. The Northern Pacific timber laid on a broken hillside, but the Weaver timber immediately adjoining it was up on a hillside in a better position and it was worth $3.00 more on the open market. I will say, by the way, that I couldn't make Mr. —— believe that, but that is the result. We were still logging under the Weyerhauser contract. On the Weyerhauser contract that year, owing to war conditions, and a substantial increase in the cost of labor, we made a loss of $16,559.18, or an average of 97.89 cents [fol. 1111] per thousand feet on all the logs we put in for them. That

was in 1917, that is, after the war commenced to influence things, and that is the year that the 8 hour rule went into effect in the logging camps, and the I. W. W. began to get busy. On the other hand on their own operations for that year in the Northern Pacific timber we made a profit of $2.073 per thousand feet, and we received an average price of $8.208 per M feet. On the tract that we bought from the Weavers we made a profit of $2.244 per M feet. Against those profits however, we made a loss in our boarding house of $1,086.56. I haven't the figures here, I thought it was here, but I can testify from my knowledge, and I know that it serves me right that during the entire period of our operations at Cedar Falls we made a profit per thousand feet on the logs that we removed of 29.8 cents per M ft. That includes taking the losses of one year, etc. and that is not average in wages, but that is taking our total expenses.

Mr. Dudley: That is when you operated over the Milwaukee?

A. Yes sir.

Mr. Horan: In that operation you charged against the actual cost of stumpage——

A. Excepting that the tract I bought, we only bought in that whole operation, about 7/10ths of that was paid for on the logging scale basis. A portion of it we bought on a cruise, and where we bought on a cruise we found that we overcut the cruise a little and that is all accounted for; the profit we made in the timber transaction [fol. 1112] is included, and this represents actual price we paid for the stumpage in every instance——

Mr. Balmer: You say you had three operations for 1917 but you didn't give the quantities out in each operation?

A. Now mind you, I didn't mean three operations. I m-an we had bought a tract of timber, for instance, form the Northern Pacific, and in order to ascertain how we were coming out on that tract I kept different accounts against it, and also with the Weavers; and the same with the Weyerhauser people, but they were all conducted from the same camp, in the same neighborhood. We put in for the Weyerhauser Timber Company 16,916,240 feet, and for the Northern Pacific timber we logged and put in 3,849,253 feet, and of the Weaver tract we logged 4,553,438 feet, making a total output of 25,308,531 feet.

Mr. da Ponte: When timber is sold its price depends upon its location does it not, that is, upon the cost of getting it to tidewater on Puget Sound which fixes the market?

A. It should depend on that but unfortunately it does not. That is one of the considerations that ought to influence a logger, but it is one of the considerations that the logger has never been able to induce the timber owner to consider at all.

Q. Now you can pay a higher stumpage price for timber that has a low freight rate than you can for timber which has a higher freight rate?

A. Yes sir.

[fol. 1113] Q. And the same applies to the tidewater property, you can pay substantially higher for timber located on Puget Sound

that can be logged into the water than you can pay for a tract back that has to be hauled in at a cost of a considerable sum?

A. No question about it.

Q. That does not affect timber which is accessible to tidewater, it has a higher stumpage value than timber which is further back and has to pay a railroad rate?

A. The quality of the timber and the topography of the ground upon which it stands also are prime factors.

Q. So that the cost of the stumpage then—I mean the freight rate you have to pay largely affects the price you have to pay for the stumpage, other things being equal?

A. No it don't, the stumpage is largely owned by large timber holders and it is not owned by the operators, and the operator when he gets his money all invested in logging equipment, as I have for instance, locomotive, donkey engines, and locomotive equipment, and steel rails and all that sort of thing, and he runs out of timber, he has to pay just about what the fellow that owns the stumpage asks him for it or he cannot get it.

Q. You don't mean to say that you are deliberately going to buy a tract of timber that you are going to lose money on?

A. I don't do that intentionally, but unless we can get some relief, that is the fix I am in today.

Q. So that somebody, whoever, it is, gets more from this timber according to its location?

[fol. 1114] A. Yes sir.

Q. And the owner of the stumpage gets all the advantage of the lower freight rates, don't he? Because he simply adds that to the price that he demands of the loggers?

A. I don't know that that has been done, but as a matter of fact the opportunity is there.

Q. And under the economic laws you operate in the logging woods the same as any other man——

A. Yes, but the fact of the matter is that 70% of the entire stand of timber that once surrounded Puget Sound and was tributary to it, and was manufactured on Puget Sound, has been cut off and removed, and there are scarcely any available tracts of timber that are available to tidewater now, except in remote places, unless they are owned by men who are actually operation; and there is no timber that is available to Puget Sound that I have been able to discover that is in the market. Otherwise, I would be logging on Puget Sound.

Q. So that it results in that the fellow that actually owns the timber, the timber owner, is the one who would get the advantage of the freight rate, or would suffer the loss, as the case might be, if it went up or down.

Mr. Henderson: That is purely argumentative, he wouldn't get it unless there was a demand for the lumber, and we object to it on that ground.

A. Now coming into the present operation, if you want to know something about that, and I am not at all hesitant, I am not dis-

[fol. 1115] closing any secrets which I would be censored for, and I regret very much that I have not the full information here. But,

briefly stated, it is this: our present operations at Goldbar, the Wallace Falls Timber Company at which I occupy a similar position to that of the Cedar Lake Logging Company as manager, we bought in the summer of 1919 a tract of timber lying east of Goldbar in Snohomish County, for which we paid and agreed to pay in round figures $1,368,000. We bought another tract of timber that belonged to people in Canada for which we paid $422,500 in cash. We added to that another tract of timber which joined ours, for which we paid between 41 and 42 thousand dollars in cash. We bought 80 acres of timber from the Weyerhauser Timber Company, two ideal forty's that cost us $9,000 for the two forty's. We bought forty acres of timber from the Pulp and Paper Company and paid $3,000 for it, a very very poor thin stand of stumpage stuff that really didn't have much timber on it, and we bought a tract of 40 acres from the Goldbar Logging Company that was imbedded in the heart of our holdings and had been largely cleared by a homesteader at one time and abandoned, that just had a little fringe of timber on it, and we paid $2,750 for that, giving us an investment in timber up there of about $1,545,000.

Mr. Da Ponte: That is where you are working now?

A. Yes sir. It is an investment of about $1,547,000. That may be just right or it may not be just right. In conducting our opera-
[fol. 1116] tions up there we are carrying an obligation of $843,000 on that timber and some odd; and we are paying 5% interest on that.

Mr. Da Ponte: On the balance you mean, on the $843,000 out of the total purchase of $1,547,000?

A. Yes sir, leaving us an investment all around up there of approximately $705,000 that we have invested in the timber. In our operations last year, and they were the most successful operations in the history of the logging on Puget Sound, we made a gross profit of $116,000 in those operations. We paid the United States Government in income taxes a little better than 30%, I won't give you the exact figures on that, I thought I had them but I have not, leaving us on an investment of $705,000 a net profit of approximately $40,000.

Mr. Balmer: Approximately $40,000?

A. Yes sir. Subtract 30 thousand from 115 thousand.

Mr. Balmer: It is 76 thousand.

A. All right, that is about what we made.

Mr. Da Ponte: And you paid your five per cent interest on the 300 thousand?

A. Yes, that is charged off and the taxes are charged off.

Mr. Da Ponte: And is left what? $86,000?

A. Yes sir.

Mr. Henderson: On an investment of what?

A. $705,000, the actual investment in the timber.

The Director: You have not included your equipment?

A. That includes the cost of our logging in equipment.

[fol. 1117] The Director: And the timber?

A. Yes sir.

Mr. Da Ponte: Have you charged off your depreciation?

A. Hold on, I have not included my logging equipment in that, that is where I made a mistake. I have in addition to that the $327,500 worth of logging equipment and that brings it down to $40,000.

Mr. Da Ponte: You mean, that is after charging depreciation?

A. That is after allowing for depreciation and everything else. Our logging equipment up there, that is, our main line railroad, our camp construction, our logging equipment and tools and supplies, that stands us $327,500 which should be added to the timber investment, and that leaves my profit about $40,000, and that leaves the investment instead of 700 thousand——

Mr. Horan: It is practically one million dollars investment upon which you made a profit of 40 thousand dollars?

A. Yes sir.

Mr. Balmer: It would not be a profit of 40 thousand dollars I think——

A. No, we made 86 thousand dollars.

Mr. Henderson: That 806 thousand dollars is timber, and the 327,500 dollars is equipment.

A. We have written off all the depreciation that Uncle Sam would permit us to write. We have done all of that.

[fol. 1118] Mr. Da Ponte: And he figures timber at $3.30?

A. No, that figure, it is charged exactly what we paid for it, because we bought this stuff in 1919, there is no question about what we paid for it.

Mr. Da Ponte: Does the government in the income taxes use the actual price you pay for it?

A. They have to.

Q. What is that $3.30 figure?

A. I never had anything to do with that. I never bought any timber prior to 1913.

Q. They allow you for stumpage?

A. Yes sir, they allow us for stumpage, they have to allow you what it costs you.

Q. And prior to 1913 then is when they used the $3.30?

A. No, we haven't——

Q. Now if you own the timber you bought in 1913, say you owned the timber for 30 years, the government permits you to charge off against your operations a certain price for stumpage?

A. They permit you to charge off for stumpage whatever you can convince them—the particular fellow that is passing on it, what the real market value of that is on March, 1913, and they make a charge of $3.30, or $1.50——

Q. But the government don't — back here and say—say the St. Paul Company here for instance, whose timber costs them on the contract basis 50 cents, on the cruise it costs them about 15 cents; now the government is not penalizing the St. Paul Company by saying your timber was only worth 15¢ and you have to pay a profit [fol. 1119] of all over that?

A. I don't know as to that, the government has endeavored to establish the market value of that timber as of that date.

Q. And regardless of what they paid for it?

A. Yes, regardless of that, that is what it sold for on that day. I do know that the government in dealing with these things assumed a mighty unreasonable attitude in nine cases out of ten.

Mr. Horan: What was the average price of logs?

A. Now during 1920 the average price that I received for the logs that were removed from our holdings that I have just described was approximately $22.60 per thousand feet.

Mr. Da Ponte: In 1920?

A. Yes, in 1920.

Mr. Horan: Can you tell what the average price of logs generally were during the year 1920, according to grade? As I understand, you gave figures for what you actually received for your logs for all three grades.

A. Yes. That doesn't include any discount for prompt payment of bills or anything of that sort, that is the gross price. The average selling price of logs, I think, during the most of 1920 would run 18, 24 and 30 dollars, and cedar ran anywhere from $28.00 to—I never got more than $30.00 for any cedar, and for Hemlock we got around $18.00 part of the time and part of the time didn't get anything, and part of the time didn't get anything for Cedar, and [fol. 1120] when I quit in that fall I had quite a little Cedar that I had to carry over, but that was about the price, $18, $24, and $30.00, which was the highest price I ever received for logs, and we were paying a high wage scale.

Mr. Da Ponte: Didn't the government fix the scale during that time?

Mr. Irving: The government fixed a price of $12.00 $16.00 and $20.00.

A. Now we resumed operations about the 1st of April of this year, and I only began operations with two sides. My average sales price of logs in April of this year had fallen to $14. I am going to leave off the cent or cents—it has fallen to $14.75 per M. At that time we had only slightly reduced our wage scale. The price of wire rope, the raw materials and supplies that went into the logging camp had remained about stationary, with the result that operating in the month of April I made a loss of $3.23 per M feet.

Mr. Horan: That was the same general character of logs sold in 1920?

A. The same general character of logs I had fallen in 1920, and my loss was $3.2299 cents.

Mr. Da Ponte: Now how much did you fall off in production?

A. I put in 3,373,441 feet in April of this year. In May of this year I logged 3,609,270 feet, and I got an average price of $15.12 in May, a little better than in April, because perhaps I happened [fol. 1121] to get a bunch of bigger timber, or more Cedar, and I made a loss on that of $1.6511 per M feet.

Mr. Balmer: Which must be 11/100ths?

A. Yes.

Mr. Da Ponte: In that connection will you state how much you could produce?

A. I could produce double the quantity, but have never been able to get the cars to do so. I could have doubled my operations in 1920 if I could have gotten the cars.

Mr. Da Ponte: Well, you did produce in 1920 a good deal more?

A. No, not so much in the average, I was going just about the same, and that is a fairly good average I think. Now in June of this year I put in 4,817,163 feet. You see I increased my production there, and the reason was I got a better logging show, and nice grounds and moved from one landing to another, and the timber was better and thicker, and we could move it faster, and I only lost .9799 per M feet.

Mr. Henderson: What was the average price?

A. The average price for June was $14.97 per 1,000 ft.—now this discloses the fact that the price of our commodity has fallen from an average of about $15.00—$14.97 from a price of $22.60, which would be a decline in our log price of about 60%. Now in doing that it has been necessary for us also to reduce the wages, that is the only thing we can do because we don't control the commodities that we have to consume in our logging operations, and we [fol. 1122] have in endeavoring to overcome this condition reduced the wages of the common laborer in our camps from $5.50 per day to $3.00 per day; and the wage scales generally in the camps have been reduced in about that ratio. So that that is the condition we are up against and I stopped logging. I didn't log any more until about 10 days ago, and I have made a further reduction in wages. We were paying $3.25, I should have said, during this period.

Sup. Spinning: That is, during April, May and June?

A. Yes. And then I made a further 25 cent reduction in the common labor, and a corresponding one on the higher labor; and a week ago last Tuesday I resumed operations on two sides, and am going to try it again.

Sup. Spinning: You are paying common labor $3.00?

A. Yes, but I want to call attention to the fact that everything has come down now. We are getting our fuel oil that last year we paid $2.55 per barrel for and there has been three reductions, a reduction since the first of July, and we are getting it for $1.85 per barrel, or about 40 cents cheaper than the Great Northern seems to be able to buy it according to their testimony. Our wire rope has had a 10% decrease and steel rails that last year we paid $72.00 for they quote me now 100 tons delivered for $35.00, and I am just about buying another load for $38.00 per ton. Now comparing this with the haul at Cedar Falls, during normal times I paid $1.40 for a 58 mile run, and on the Great Northern I am now required to pay $2.20 for less than one half of that haul, to be frank about it.

[fol. 1123] Mr. Henderson: Now with reference to the other costs that might enter in, since the freight rates have been increased twice has the Northern Pacific reduced its price of stumpage any?

A. I have not tried to buy any from the Northern Pacific, I have never been able to get any.

Mr. Da Ponte: We never did raise it.

Mr. Henderson: You said the fellow that owns the stumpage gets the benefit of it?

A. I would like to make this statement with relation to our stumpage holdings. The tract of timber for which we paid $1,368,000 was taken at a stumpage price of $3.50 per thousand feet, but so far our cuttings—and we keep accurate measurements of every acre we cut off, and we compare the actual log scale on the 40 acre tract as logs with the log scale as shown by the cruise upon which we pay, show that we are not cutting up to the scale, so that our cutting is actually costing us approximately $4.00 per thousand feet when you take into consideration the way we got jipped on the scale. The tract we paid $22,500 for was paid on a log scale of $3.50 per thousand. The tract we paid $41,000 to $47,000 for was bought at $3.00 per M on the log scale.

The Director: We will take a recess until 1:30.

[fol. 1124] 1.30 p. m.

Hearing resumed.

Q. Did you finish your discussion of the relation of prices of log operations in 1921 as compared with 1920?

A. I do not remember what I said.

Q. Could you give us a comparison of the cost of log operations in 1921 as compared with previous years when you were operating the Cedar Lake Logging Company when times were normal and prices of logs were low?

A. In a general way. In 1920 my falling and bucking cost as I would call it, was about $1.68; our average cost at Cedar Lake was about $1.68; the yarding and loading cost were in nearly the same proportion; that is in per thousand feet board measure. But, it must be borne in mind that the operations that I have described at Cedar Lake and up to the close of 1916 were all conducted under a ten-hour working day. In 1917 an eight-hour day went into effect in the logging camps of the State of Washington and we are now and have been since that time operating under the eight-hour a day plan, which even at the same wages and under the same conditions would add 25% to your labor cost. At Cedar Falls we were paying most of the time our common labor $2.25, as against $5.50 in 1920 and against $3.25 during the first half of 1921. The cost of logging has from time to time materially increased, and this perhaps may explain the general situation. The logging cost through the Puget Sound is history now; it is higher now than it was six or seven years ago; the cost of logging, getting your logs on the cars and delivering them to the common carrier or to water, depends upon a good many factors; the size and density of the stands of timber; the quality of [fol. 1125] the timber; the topography of the ground upon which it stands; logging costs are increasing for the reason that timber that was early logged in Puget Sound was timber that was along close to tidewater; it was on the flats and on the first benches; railroad construction was easy. The terraine was easy for the men to get over and to work; falling and bucking was less expensive; you got a bigger return per car in thousand feet of product, because on smooth ground the breakage of the timber is very much less; the timber

tributary, adjacent to the waters of Puget Sound, that lay upon the ground, easy to log, has been rapidly removed until today, seventy per cent of the timber directly on Puget Sound has been removed; the logging operations have moved farther and farther back; they have gotten into the mountains where the timber is small; the quality of the timber is not so good as that which grew upon the rich bottom lands and lower benches. The density of the stand is not so great; and the logging conditions are very very much harder today where the logger maintains expensive bridges, rock cuts, terrific grades;—where railroad construction is very much harder; the falling and bucking cost is much higher, because falling and bucking trees on a hillside is not the same proposition that it is on level ground. The bucker on level ground has nothing to do but to saw the log off. When he gets on a hillside, on rough ground, he has to cut props to put under the fallen tree and prop the tree up, and he spends as much time getting the tree propped up, so when he gets it partially cut up it will not break up, as it don't do on level ground. Then he has to watch for danger, because if the fellers happen to fall a tree up hill to save it, it is likely to fall down hill and kill the fellers. Buckers have the same danger. It is likely to drop off and [fol. 1126] roll and it makes bucking more difficult. Then when it comes to getting the logs out, and yarding them, we have to haul them up and down hill and over rocks, and across canyons, where we used to get them on easy ground. It is constantly increasing in cost. The eight-hour day and the increase in wages have more than doubled the cost of logging operations in the last six years.

Q. The character of the logs you took in the Cedar Falls operations was similar to the character of logs in the present operations?

A. Almost identical with the timber we are logging now. At Cedar Falls, however, I got a large percentage of hemlock. Our hemlock now is running about three per cent, but at Cedar Falls it ran 20 to 25 per cent; and at Cedar Falls I culled an average of 1½% and here I am averaging 7%, in fir.

Q. Tell us what your cost was in 1914 for putting logs on cars at Cedar Falls, as compared with costs in 1921, per thousand feet.

A. I cannot give you the exast figures for 1921, but I would like to make an apology in explanation. I have brought this statement of the Wallace Falls Timber Company, and the combined reports that went to Mr. Webb. We have had it down here at both of these former hearings, but the President of the Wallace Falls Timber Company, Clyde Walton, started for his old home in Oklahoma; went on a business trip, and he insisted on taking this report, for the reason we are endeavoring to raise the money necessary to build a railroad on the south side of the Snoqualmie river, and a log dump in Everett and have the freight in our own hands, and avoid the excessive rates we are required to pay; and these statements are all back there for that purpose now. Those were the only copies I had. I did not have time after I received notice of this hearing to get my bookkeeper to make up others.

[fol. 1127] A characteristic operation for 1913, 14, 15 and 16 to

take logs out of the woods and deliver them to the Milwaukee Railroad at Cedar Falls without the freight or stumpage, cost me $4.3345. A similar operation last year was in excess of $14.00, though I would not undertake to say just the cost now.

By Mr. Dudley: Just the cost of getting to the cars?

A. Getting them on the cars, delivering them to the railroad.

Q. From about $4.33 in 1913 to $14.00 at the present time?

A. Yes sir. I can give you a month's cost in 1921. Take June of the present year which was our most successful month of this year, in which we lost less money than any other time. I want to explain that this cost is not a characteristic cost because I had some supplies that were carried over from last year. My wire rope cost is very much reduced from what it would be if I was not using our supplies from last year's prices. Blacksmith shop tools and supplies in our blacksmith shop amounted to 1.97 cents per thousand feet; labor 8.3 cents per thousand feet; total cost *cost* blacksmith and machine shop 10.31 per thousand feet. Felling and bucking and tools and supplies cost us 3.58 cents and the labor of felling nad bucking 1.39 plus, making the total cost of selling and bucking of $1.4311.

By Mr. Balmer: What does that make the total?

A. The total of the item was 1.4311.

By Mr. Balmer:

Q. I understood you to give the cost of delivering the car to the railroad in 1920 of $14.00.

[fol. 1128] A. No, I am getting down to 1921 figures now.

Q. You have got a lot of items and I want you to add those all up.

A. I have not reached that yet.

Q. I beg your pardon.

A. Our general operations including yarding and logging on side one, they worked 24½ days. They yarded 2,484 logs, or 1,597,338 feet. They average 65,197 per day. They loaded 224 cars. The average logs per car was 11. The average number of feet on a car 7,131; the average scale of logs 643 feet and labor costs of yarding and logs to the landing was 78.26 cents, and the cost of loading them was 42.53 cents. The same for side two. Yarding and loading 1,994,417 feet. They worked 25½ days, average 78,213 feet per day and put in 3,382 logs they were loaded on 297 cars and average feet per logs of 590 feet. The cost for yarding these 58.62 cents and for loading 33.97 cents. So much for the general logging expense.

Now railroad operation. Locomotive supplies cost us 6.23 cents. Fuel oil, lubricating oil 37.8 cents per thousand feet. Labor of operation 26.34 cents and for maintenance of track etc. 17.3 cents, making a total cost per 1,000 feet of 87.67 cents.

Then in addition to that we have grading track tools, $1.14, oil 46.1 cents, that oil is oil used. We burn kerosene oil in an electric generating plant that is used to operate some small machines in our blacksmith shop and light our camps. We also use a pump for our [fol. 1129] donkey engine in the work and that also burns oil.

We have then general expenses 22.9, office and freight expenses 10.12 cents, industrial insurance 16.26 cents; medicinal aid .94 cents. The discount that was taken because our logs were paid for—the custom is to sell logs 60 days net or 2% discounts, the discounts taken amounted to 39 cents dumping and rafting costs us 52.65 cents. Depreciation amounting to 62.67 cents, and the balance of the cost is made up of interest, scaling. And the construction of spurs, we charged that as operation because we build a logging spur that is perhaps used for six weeks or two months and that line is taken off and moved elsewhere.

The steel and such things that go into that spur are carried into capital and the flat labor is charged. That cost being $1.474 cents. Taxes upon our output amounted to 35.2 cents per 1,000 feet. So far as our timber holdings are concerned up there, taking the average for 1920 which was perhaps say a pretty fair year, we did not run full capacity. We put in a little more than 43,000,000 feet. Our holdings are just about sufficient to run ten years. We charge the taxes, one twelfth of the taxes, each month to that month's operation, so this is 35 cents per 1,000 feet, representing one-twelfth of the annual state and county taxes but do not represent income taxes. We lost on lodging and boarding our employes 11.03 cents, and on boarding alone 2.24 cents.

Our operating cost was $2.4718, or 20.18 cents more than the rate [fol. 1130] that we are supposed to pay. Our stumpage cost was $4.08.

By Mr. Balmer:

Q. That is on ten years' supply?

A. Ten years' supply, $4.08. That made the total cost of our logs in producing for the month of June of this year, which is the last full month we have operated, $15.9511 per thousand feet. We sold them for $14.9712 per thousand, sustaining a loss of $.9799.

By Mr. Balmer:

Q. That figure per 1,000 feet is not the item corresponding to the one you gave us for 1913 to 1920. That is the total cost of delivering your logs?

A. Yes sir.

Q. Those figures for 1913 to 1920 were the cost of delivering the logs to the railroad, what was that cost?

A. All you have to deduct for that is to deduct the freight $2.4718, plus the stumpage $4.0801, substract that from the total.

Q. How about dumpting?

A. That won't come off of that. The dumping was included in the other charge I gave you.

Q. We had operating $2.47 plus stumpage of what?

A. $4.08.

Q. That gives us a total of $6.45?

A. Yes sir.

Q. What is the figure from which we deduct that?

A. $15.95.

Q. That means that as compared with the cost of $14 for the year 1920 per thousand feet, your cost for similar operation in June [fol. 1131] 1921 was $9.50?

A. Approximately. And in that connection I want to call attention to the fact that we are getting $8.00 a thousand less in the market for our output.

Q. Do you charge against each month's operation depreciation of your main line?

A. We charge for each month 1/12th of the depreciation we are permitted to write by the Federal authorities. That depreciation runs all the way from 6% to 10%.

Q. The cost figure you gave us for Cedar Falls operation and Cedar Lake, did you include that stumpage?

A. No, figures I gave him now did not include stumpage and I would like to explain I made that clear in my former statement, but in order that we may not be confused here this lighting cost includes taxes and interest. At Cedar Falls we paid for our stumpage on log scale foot. The logs were cut and we had there no taxes or interest to pay. Taxes and interest are not included in Cedar Falls but are included in the figures you have.

Q. You just gave the figures of what it cost to put logs on the cars exclusive of freight at Cedar Falls. Did that include cost of stumpage?

A. It did not include any cost of stumpage.

Q. Are you pretty generally familiar with the logging operations on Puget Sound at the present time?

A. Yes, I think I am. I try to keep in touch with the conditions pretty generally.

Q. As to the class of camps operating on Puget Sound. That is [fol. 1132] making a distinction between logging operations that transfer their own logs to tidewater over a common carrier and those that put them in with their own equipment by railroad or otherwise.

A. The camps we have been running this year with which I am familiar conducted continuous operation this year, have been camps that put their own logs into Puget Sound, that carry their own logs and did not have to rely on the common carrier. Almost without exception the camps that are operating and paying freight to a common carrier have been the camps that have closed down.

Q. Is it not true pretty nearly, all those logging operations that carry their own logs have been continuously operating in 1921?

A. Yes sir. And seem to be having a pretty big output if hearsay is reliable. We get hearsay testimony, of logging conditions, and who is putting in logs, and how many of them are put in per side, that is all gossip among the loggers. We go you know to Bill Stevens and say to him that I got in 112,000 feet per side last month and another fellow says I don't know how the devil you did it because I cannot make more than $60.00 to save my soul. We hear all of that. It is almost common knowledge among men engaged

in the business and I know that the camps that are operating their own railroads have been running. I have visited at least one of them. I was up to a camp of the Ebey Logging Company and it [fol. 1133] was operating right along. They have a main line of their own running up in the north end of Snohomish County to tidewater at Marysville, or near Everett. I watched their performances.

Q. Can you give us the approximate percentage of logs that are hauled in Puget Sound over roads of common carriers and that that is put into the water of the sound by other means?

A. I can answer that question only by an expression of opinions. It is my best judgment founded upon my observation and knowledge of logging conditions that approximately 70% of the logs that go into Puget Sound are handled by the logger and about 30% of the loggers' logs are taken over by the common carriers.

Q. How much of the lumber manufactured on Puget Sound is carried by the railroad and how much goes off shore to ship?

By Mr. Dudley: I object to that as immaterial and irrelevant.

By Mr. Balmer: It is evidence of rather doubtful value in view of its generality based on the hearsay in large measure, and in view of the fact that statistical evidence of the same nature has already been put in.

By Mr. Horan: I will withdraw the question.

By Mr. Henderson: In Great Northern exhibit #23 there is shown what is alleged to be a deficit resulting from handling logs in the state of Washington based on traffic in 1920, a summary of the results of operations of log service based on cost of operating solid [fol. 1134] log trains under reduced wages and cost of materials effective after July 1st, 1921. On page 2 of that exhibit it is stated that this study was taken from the train register for August, September, October and November 1920, and that there were 19 solid log trains east bound and 24 west bound loaded trains during that period.

A. Does that mean trains or cars per day?

Q. The exhibit says the solid train logging movement of logs between Goldbar and Everett during August, September, October and November 1920?

A. Yes sir.

Q. With 19 east bound empty train loads in solid log movements and 24 west bound loaded trains. Now were there any of your shipments that moved in solid log train movements exclusively in August, September, October and November of 1920?

A. In August, September, October and November and up to the 10th of December I was shipping logs every day except Sundays and I do not know whether they went down there with nothing but logs or not. They might have done it 19 times but you can't figure the number of days between those dates exclusive of Sundays, it may be there were 19 days they hauled my logs without anything else. If there were, I did not see it.

Q. The exhibit says 24?

A. There is perhaps there 110 days, or 110 separate shipments

out of that number if there were 19 days with nothing but logs—it might be.

[fol. 1135] Q. There was 159 loaded cars west bound and about 453 cars eastbound. Do you know where they got all those extra 200 cars?

A. Haven't you got things confused?

Q. 493 empty cars moved east bound, 650 loaded cars moving westbound?

A. That might have accounted for the car shortage I was up against all that time.

Q. They have two hundred cars more loaded moving west bound than they did move east bound. You must have shipped a good many more than 650 cars during those four months?

A. Yes sir.

Q. Whatever you shipped over and above that, moved in log trains such as you have described.

A. During that period I imagine we averaged between 20 and 24 cars a day. Sometimes we shipped I guess 30 to 35.

Q. Turning to this same exhibit on Page 4, which is the analysis of this trainload movement, we have charged up here, time spent in switching, 4 hours at the Weyerhauser Mill B. If that was moved in solid trains of logs between Goldbar and Everett, can you imagine what anybody was doing with the switching crew down there at the Weyerhauser Mill B for four hours?

Objected to by counsel for the carriers as immaterial.

Q. You know something about it?

A. I do.

[fol. 1136] Mr. Balmer: If he don't know any more about it than he does about how cars get to the Delta yards he cannot testify.

By Mr. Henderson: You don't know yourself. You have 33 miles tracked up but the records don't show it.

By the Director: Answer the question if you can.

A. If the logs are taken in solid train loads so that it is not necessary to separate them from freight in the same train there is not any reason to spend any extra time whatever in putting those logs onto the dumps and taking the empties off. The train crew from Goldbar can easily take those logs 29 miles in 2 or 2½ hours and they get paid for eight hours when they do that. There is no reason they should not set them on the dump and dump them and bring them back within the day's work and if they spend four hours going back to the dump that is absolutely unnecessary and unwarranted, and a needless expense.

By Supervisor Cleland: How long does it take a freight train to go from Goldbar to Everett?

A. It ought not to take more than two hours a distance of 29 and a fraction miles and down grade all the way; 15 miles an hour will put them into the log dump at Everett.

Q. Turning to the expense bill shown here for fuel. Do you know what the price of fuel oil is today?

A. I am paying $1.85 a barrel at Richmond Beach.

[fol. 1137] Q. Where is Richmond Beach?

A. Somewhere north of Seattle, between Seattle and Everett on the Great Northern. That is the way they bill it. They have some other name for it. I believe they call it Point Lewis.

By the Director:

Q. What does it cost to get that oil to your camp?

A. I cannot answer that off hand. It cost enough because we take it over the Great Northern Railroad.

By the Director: Does it cost you the difference between $2.16 and $1.85 to get it to the camp?

A. I would hardly think it cost 30 cents a barrel but it may however. In our item of cost of oil we add the freight into that.

Q. Add the freight from where?

A. The freight we actually pay on it.

Q. From where?

A. From Point Lewis or Richmond Beach.

Q. It is delivered to you on the Great Northern at Point Willis some place between Everett and Goldbar?

A. Between Seattle and Everett.

Q. For $1.85 now?

A. Delivered to us at that point and we pay the freight.

Q. You spoke of contemplating building the line from your camp, your logging operation, to tide water for your own company?

A. Yes sir.

Q. If you did that what percentage of cars would you have to have over and above the ordinary capacity in your camp. For instance [fol. 1138] if you ship 45 cars a day which you could do with four sides, couldn't you?

A. Oh yes, if I was running four sides.

Q. How many cars would you have to have?

A. I would say, roughly, about double the number of cars it would be necessary, depending on the number of trips and to take care of bad orders and give an ample supply.

Q. Your trains could leave there, Goldbar, in the evening and have the cars dumped and hauled back in the morning.

A. We could operate as we tried to operate with the Great Northern last year. We could get along with 45 cars.

Q. Do you know of any reason why, when the cars are pulled out of Goldbar in the evening they should not be back in the morning?

A. The only reason is because they were in bad order and couldn't get back. If the cars were all out of order they could not run over the road. They could not get back. They should not have been last year in such order. That is no reason that would appeal to a logger.

Cross-examination.

By Mr. Da Ponte:

Q. You stated your total investment in lumber was $4.08 per thousand. I want to get at the total cost of that timber in that operation.

[fol. 1139] A. I cannot give you the figures exactly, but approximately off hand $1.368 and we bought more and more afterwards.

Q. Give me the first operation.

A. It was about $1,540,000 as I recall it.

Q. What was the amount of your stumpage?

A. Approximately 400,000,000.

Q. You say you figured on a cut of 40 million a year?

A. 43 million last year.

Q. You figure about 10 years' supply?

A. We figured on cutting about 50 million a year. If we cut 40 million a year, we should do that anyway, and we will do more than that if we get an ample car supply.

Q. Your interest was 5 per cent?

A. 5% we are paying interest now on $843,000.

Q. You have got over 1,540,000 in your timber so we figure that interest charges?

A. Yes sir.

Q. Taxes are about two per cent are they not?

A. Yes sir. Taxes last year, city and county, were $18,000.

By Supervisor Cleland: I think you are confused about interest charges. You testified you were paying interest on a half million and no interest on that——

A. Paying interest on $843,000 of indebtedness. That is our entire indebtedness.

[fol. 1140] Q. I understood, but whether you are paying interest on it or not, that is the cost of the money to you.

By Supervisor Cleland: In other words, you have not included interest on anything excepting the 843 thousand dollars.

A. I am figuring the interest on the indebtedness that we actually owe. We do not owe anybody else anything.

Q. I just want to know for the general purpose of—what were taxes?

A. Eighteen thousand dollars, and we built the school of domestic science and more than that for the people of Goldbar last year.

Q. Then you have in addition your Federal taxes?

A. Yes sir.

Q. You know what the income tax was?

A. A little over thirty thousand dollars this last year. There will not be anything this year.

Q. Your total taxes were on your equipment—that was $18,000?

A. Yes sir.

Q. I was trying to get at how much per thousand feet per annum you have paid in taxes and the valuation. Do you know what your assessed valuation was?

A. No, I do not.
Q. What is the levy up there? About 40 mills is it not?
A. Oh no, about 75 mills.
Q. You are supposed to be on a 50 per cent valuation basis?
A. Yes, supposed to be.
[fol. 1141] Q. Taxes would be about 3½ per cent according to that?
A. I do not know what the valuation is. It may be 50 per cent, it may be very much more or less.
Q. You paid about two per cent?
A. I would not have these figures as——
Q. I figured your taxes at two per cent, that would be conservative?
A. We have got property up there, investment up there of one million and three quarter dollars. The timber investment stood *up* about one million 540 thousand dollars, and we have $320,000 of equipment. That makes our taxes about one per cent on what the property cost us.
Q. Taxes on your timber?
A. About one per cent I would say.

Cross-examination.

By Mr. Balmer:

—. When you commenced your operations at Goldbar United States Railroad Administration was in control of the Great Northern and all of the other railroads?
A. Yes sir, I think it was, but not when we began operation.
Q. When you built your fir track?
A. Yes sir, but I did not ship any logs until January 28th, 1920. I think the railroads had then been turned back.
Q. No, not on that day. You do not intend to infer that the requirements that you pay the expense of starting the siding and spur to Goldbar was any different from what anybody else would [fol. 1142] have had to pay for making a similar installation?
A. Oh no, not at all.
Q. It was the policy of the United States Administration as expressed in one of its general orders?
A. I presume that is true.
Q. To require every shipper who desired a spur track or siding of this kind to pay the entire expense beyond the point of clearance?
A. I cannot tell you whether that was a rule of the Federal Railroad or what sort of rule it was. I know I could not get it done and had to do it myself, and while I was building the tracks up there I was ordered off by practically every official of the Great Northern Railroad because I did not have written authority but I went right ahead and built the tracks just the same.
Q. You lose the entire control of your logs as soon as they go in the Weyerhauser dump?

A. Yes sir, except that during the portion of the time at night last year, in order to facilitate the car movement I had to pay all entire wages of the entire dump crew there because that was an extra crew that was put on night service and the Weyerhauser Timber Company was not interested in how fact the cars came back to me; and they refused to maintain night service, and I had to put that on myself and it was under their supervision.

Q. How often, on an average, are you down there at the dump when the cars are being unloaded?

[fol. 1143] A. Perhaps once in two months, but I want to qualify my testimony regarding that dumping proposition this morning when I stated that no cars fell and struck the sills. I had overlooked one thing, and that is this: That when logs are loaded on the open faced cars or cars not equipped with bunks, the logs lie flat on the deck of the car and it is impossible to get an unloading line under the logs, and consequently they are rolled off in any way they can roll, and they may fall and hit the sills of the car; but where the steel bunks are used the line is passed under the load and they won't fall and hit the deck, but they will roll on the open flat cars without bunks. And I neglected, as a matter of fact, have forgotten that condition with reference to the car without bunks where the line cannot be placed under them. They get that line under the end of the load and they will shut them off any way they can, and McCaustland's testimony that the top log will fall and break the deck is perhaps right.

Q. You say you have trouble with them down there because of their failure to cut the stakes on your cars?

A. They refuse positively to permit their men to run the risk in cutting those stakes, but when we have been watching the operation they have always been very careful to trip all of those Seattle Bunk cars, possibly they knew I was watching; but the Seattle cars come back from there every once in a while with a great deal of damage and that leads me to think that when I am not there they [fol. 1144] do not trip them, and I have talked to the Weyerhauser people and told them I am insisting on their paying for it because I have to pay for them myself.

Q. You are down there about once a month and when you are there they are very careful to trip these bunks?

A. Yes sir.

Q. The other 29 days of the month you are not there and the logs fall off the best way they can?

A. I think they do. The condition of the bunks causes me to think so.

Q. You consider that circumstantial evidence?

A. Yes sir.

Q. Don't you think it is quite possible that while you have been down there you have not seen them insert a hook underneath the side sills, or the stake pockets, but always in this hook or loop at the top—that this is the cause when you were not there they inserted them in the side plates?

A. No, it would be much more difficult and takes more time than it does to get it over the brow skid. I do not think that is possible at all. It would be an unreasonable assumption.

Q. If the same circumstantial evidence exists in one case as the other it will be just as reasonable?

A. As a matter of fact, all cars equipped with steel bunks do not have any particular damage done except knocking the brake wheel and that will continue as long as you put brakes in the same place. They are jammed up like other cars.

[fol. 1145] Q. How long a log do you put on those cars?

A. Up to 96 feet.

Q. You ship tripple logs occasionally?

A. Yes sir, a great many and double loads.

Q. How long are the logs in single loads?

A. As many as 32 and 40, as many as it is possible to get out of a tree. If there is a break in the tree we sometimes have to make 24 or 28, or 30, or 34, or if the tree length of the tree will not divide into lengths of 32 or 40 feet we make different lengths.

Q. When you commenced operation you were anxious to get a 43 foot flat car?

A. Yes sir.

Q. Why?

A. We wanted 43 foot flat cars to give us room to work on the end of the car, and make the brakewheel on the end of the car, and when I talked about that with the Great Northern Officials I did not have any information that there was any other kind of car with the brake set on the side length. I had been logging seven years and was used to the Northern Pacific equipment—the Milwaukee—had not seen them.

Q. And what was that equipment?

A. The Milwaukee equipment was 42 foot deck of the car.

Q. What is the length of the flat cars Mr. Irving used?

A. I do not know. Mostly 40 feet I guess.

[fol. 1146] Q. Do you suppose by your statement that the road crew that brings your logs into the dump should head down on the log dump track and leave your log cars there—do you base that on any actual knowledge of practical railroading?

A. No, I do not say that could head down and leave them there. I said there was no reason they could not place them there. The yards at Delta are used by two or three different railroads. There is a whole line of industries, saw mill after saw mill and paper plant just below the limit, and there are many industr-*y* and there is net work of track here and there over that country.

Q. How would you figure the road engine would get cars onto the dumps if they do not go onto the dump with them?

A. Just the same as switching engine could get over the same road. There is no reason for special engines and special crews when you are paying men for this time.

Q. You prefer the road crews to do it?

A. Yes sir, they get all the cars and they could get them back to Goldbar in six hours from the time they left with them. That is the way my crew would operate it.

Q. You know the road crews and the switching crews work under rules made on the railroads by the National Labor Board?

A. I don't know anything about that.

[fol. 1147] Q. You do not intend to represent to this commission that it could abrogate those rules and have the railroad company have the road crew do that ordinary switching work?

A. I am not familiar with that rule business at all.

Q. You are telling how it looks to you as a practical proposition?

A. Yes sir.

Q. You were not speaking from railroad practically standpoint at all?

A. It may be you are so hedged, it may be you are hedged about you cannot do reasonable sensible things. We want to do it that way.

Q. Why don't you work your men ten hours?

A. We do sometimes. The reason I do not work them is because other men in other companies don't. We pay our men on a basis of ten hours a day.

Q. It is a government regulation you were required to cut down the working day from ten to eight hours?

A. No sir.

Q. Wasn't that a government requirement?

A. No sir. When one of the principal loggers in Puget Sound country started and surrendered to the men, and ultimately it was done practically in all the camps.

Q. In other words, our working regulations are forced upon us by the government?

A. You had them long before that.

[fol. 1148] By Mr. Henderson: I object——

By Mr. Da Ponte: Have you heard me roaring at you at any time in this case?

By Mr. Henderson: Yes, lots of times.

By the Witness: I will say this. The Conductor who is operating that log train came to me and asked me to exercise my influence, and told me he could dump the cars because he had a home in Goldbar and if they would let him dump the car he will be only too glad to do it and he would get back home and visit with his family, and he could do it all in a day's work.

Q. Did he tell you if he was a member of the union or not?

A. He told me afterwards the union dump switching crews put the kibosh on it. That is my knowledge of the union regulations. I got that from one of your conductors who was anxious to do the sensible thing, not to help me out but because he had the time after the logging run and had his home up here, and he was the fellow who told me it could not be done because of the switchmen's union and their action on it.

Q. You was given to understand because of the requirements of the road crews they could not do it, and the switching crews had to?

A. Yes, sir.

Q. I believe you suggested that in moving your logs from your siding at Goldbar the little engine and caboose would run up the main line out of Goldbar?

[fol. 1149] A. Yes, sir.

Q. Move the caboose on the main line, go into your siding from the west switch?

A. Yes, sir.

Q. Pull out the cars after they were loaded on the main line attach the caboose and go?

A. Yes, sir.

Q. What is the operation when they are setting empty cars on your siding?

A. They set empty cars in there, they turn the locomotive around in Goldbar and coming up with empty cars, they turn the locomotive around and back the cars up into the spur. But when the local freight brings them up she backs them east to that end because they are headed the other way and back them on the other end of the spur which is half a mile further along or 2,790 feet.

Q. In connection with your suggestion that the minimum should be based on the average of the trainload of cars that the logger shipped on any particular day. As I understand it, your idea is that although the load of some individual cars in the string would not be up to the minimum it would be proper to have them averaged up with the other load, so that if the average was high enough there would be no additional charge?

A. No penalty.

Q. Do you think that rule should be carried so far that if a logger is shipping 20 cars a week in lots of two or three cars he should be entitled to total of the shipments for the week?

A. No, I would not make it the shipment. I think it would be [fol. 1150] fair to everyone concerned, because as I said there are very few loggers that are putting in any logs at all—if they have one side they are going to ship say ten or 12 cars a day anyway and if not they want logs very long. I think the average shipment would be the propert thing, but I do not want to get into an argument again about the excessive load and the requirement that is compelling us to do the impossible of trying to penalize us in doing things that we cannot do. Informally, I might say, that the situation has always been such, and since we started logging 8½ years ago—the logger wants the use of the cars to get his logs out of the woods.

We have conditions in the woods that we have to handle cars over. We are operating over grades that are in my own instance as steep as nine per cent, and in some instances around 30 degrees curve, and we are obliged to be careful in the loading. We get them down over our own road. That is one reason that we would like to see that minimum established, because it obviates the risk not only to you but the risk to us. A load may be started on our grade, one of those small loads, and the log shifts a little bit and by the time it

gets out onto your line and you speed it up to 30 miles an hour you have quite a lot of logs scattered along your railway.

Q. Could you avoid that by chaining your logs on the cars?

A. Oh no, not without changing the whole system of logging operations in the Pacific Northwest.

[fol. 1151] Q. Are you acquainted with logging operations in Eastern Washington and Idaho?

A. No.

Q. Have you ever observed them?

A. Yes, I have observed them and I know the way they load the logs.

Q. Is it your judgement that the way of handling small logs by chains adds to the railroad hazard at all?

A. I don't think it adds to the hazard or very much to the safety.

Q. Logs are just as secure by means of chains as the other method?

A. I don't know that.

Q. My idea is to inquire why in your judgment the piling of a number of these small logs on the car and making them secure on the car by means of chains as they do on the other side of the mountain and in Idaho, makes a load that is just as secure as you get on the west side in the operation with larger logs secured by stakes or bunks.

A. Yes, sir. For stakes in loading small logs it is necessary to cut high stakes and under an entirely different system of loading from anything we have in the western part of the state, and if you undertake to rig up a proposition to load these small logs you would have one very difficult to load than the same as large logs, and it would mean a slowing up of operation and the great increase in the cost of moving the logs. We have a load or two of small logs today, small [fol. 1152] hemlock top logs and some large logs. Over there they are uniformly small logs. We would have to carry on two entirely different systems because we have large logs here and they have only the small logs. With us they all come in and they all have to be loaded on the next car that comes and you do not have facilities for switching these cars around and making changes to suit the different sizes of logs. It is impossible to have two systems working altogether. It is practically an impossibility to do it at all successfully.

Q. You mentioned that you have a certain amount of stumpage. Do you own both the timber and the land, or merely the right to cut off the timber?

A. We own the timber and the land.

Q. The price that you quoted is what both cost you?

A. The price I quoted for that is the price for both the land and timber. The amount we paid. That is our investment. But in figuring our stumpage costs however, following the theory that has been prescribed by the Federal authorities, we have been obliged to put a value on the land itself and the separate value on the stumpage, so that our stumpage, figuring the cost of the stumpage does not include the land value. That is, in the estimated figure I gave you of $4.08. But it does include this. We bought our original tract of

land up there on a cruise of the timber, estimates of the timber, we are supposed to have paid $3.50. We have found that the timber [fol. 1153] is not cutting out. That cruise is by 40 acre tract. When we clean up 40 acres of land we have cut we find we have run short of the cruise and if we divide the number of thousands of feet accorded to that 40 acres for the price we had to pay for it it has increased our stumpage price from what we are supposed to have paid to the figure I gave you. The land value is carried on a separate account and is not carried into this cost statement that I gave you. We still have the land, but capital investment account embraces the value of the land which is very small. Not much of the land is worth it.

Q. Do I understand that the total amount of timber you have is about 400,000,000 feet?

A. I should say so.

Q. On account of investment of about $1,500,000, $843,000 is borrowed money?

A. That is the balance of the unpaid purchase price of our first deal. You may call it borrowed money. It is not really borrowed but the balance of the unpaid purchase price.

Q. I suppose your contract requires you to reduce that principal year by year and pay the interest on the deferred amount?

A. Our contract requires us not exactly that. I think under that contract we pay something like, from the time we started 13 or 14 [fol. 1154] years to complete the payment of the account we paid 5% interest on the unpaid balance of the purchase price. We pay that interest in two installments, semi-annually, on the 16th of August and the 16th of——

Q. Do you do, as I think an accountant yesterday testified most of the loggers do, charge against the amount of timber cut in any particular year, the total carrying charges of all of your land?

A. We charge first to expense each month that we operate, we charge 1/12th of our annual state and county taxes and 1/12th of our annual interest charge, whatever that may be.

Q. Upon all of the timber that you own?

A. Whatever our holdings may be.

Q. On all of the timber that you own?

A. No, we charge it against our operating expenses.

By Supervisor Cleland: I think that counsel and the witness have all the time been confusing the term interest. I think what you mean and what Mr. Da Ponte means was interest upon the investment, or upon the total investment. What he is talking about is interest that he is paying on the operation of that investment for borrowed money.

A. We do not figure any interest at all. We just divide the interest that we are compelled to pay in the twelve parts, and each month when operating we charge the interest that accrues that month against our operation.

Q. You do not charge against your operations anything by way of interest on that part of your total investment?

[fol. 1155] A. No.

Q. That is what you owe to someone else. You do charge against operating expenses interest on money you owe somebody else.

A. We charge what we have to pay.

By Mr. Da Ponte: If you owed the entire purchase price of the timber you would charge the interest on that, and if you owed half the purchase price you would charge the interest on half?

A. We charge interest on what we actually pay.

By Supervisor Spinning: You have paid up about 50% of the purchase price and are now paying interest on the other 50%?

A. Yes sir.

By Mr. Da Ponte: How do you carry the charges on what you have actually invested there?

A. We do not charge it. We are trying to work that out. These figures represent actual money that we actually pay in the operation of our logging operations up there and they show the money that we actually received from the sale of our product and there are no estimated figures anywhere in it.

By Mr. Balmer: Does that mean this, that you charge as operating expenses against his operation all interest or money that you owe on all your holdings and all taxes that you pay for that year on all your holdings?

A. On all of our holdings that are embraced in that operation. If we have got holdings somewhere else that is not a portion of that [fol. 1156] operation and has nothing to do with it.

Q. You have, as I understand it, just the one operation? A. Just the one operation. That is the only thing. To get the proposition clear perhaps to the commission and to you gentlemen we could not afford to go into the logging business with the amount of equipment and investment we had in railroad material and locomotive and donkey engines, and a thousand and one things that go to make up a logging concern, unless we had holdings sufficiently large to justify the expense. We spent $25,000 to get connected with your line and then we built miles of railroad to move our equipment in there and unless we had about what we have, ten years operation for three sides, a three side logging camp, we would never get our money back; and in doing that we are estimating all of the taxes in ten years and we are really eating up all of the cost, dividing it over a 10 *ten*-year period.

By Sup. Cleland: Suppose you had a thousand acres of timber up there and you were only able to work 100 acres in a year. Where would you change the taxes for the other 900 acres and interest upon the money you paid or which you owed for the other 900?

A. I would charge the interest if I was charging and operating a road up there, to my operation just as a railroad does. They have bonds and indebtedness and are paying interest, they have got to [fol. 1157] pay that out of the operating expenses.

By Supevisor Cleland: You pay taxes on the entire holdings out of the operating revenue?

A. Yes sir. To me it is clear. It would not make any difference for this year. Instead of charging our interest up and our taxes to

operation we charge them up to the cost of our stumpage. Next year we just increase the cost of stumpage that much, and in the end it works out just the same. It is a cost to be charged up as part of the ultimate price of the log which come out from up there. One way is just the same as the other.

By the Director: Is it done by loggers and other loggers generally, purchasing holdings in two different localities which cannot be worked from one operation, in two different counties say?

A. My understand of that is, and if I read the instructions of the United States Income Tax Department, that is not permissable under the income tax conditions. I do not think it is general as I do not know of any instance where it is done. I do not believe it would be permitted to go under Federal regulations because they require us to fill out one of the most complete questionnaires that ever happened. We have to make maps of a certain size showing the stand of timber and where it is, and we have got to show that it is contiguous and constitutes one operation in order to satisfy them.

By Mr. Da Ponte:

Q. That is for income purposes?

A. Yes sir.

[fol. 1158] Q. In your income whether you show profit in 1920 depends upon how much you owe for your timber; that is, whether or not you make a profit in any given year depends upon how much you owe for your timber because that fixes the amount you have charged against the operation?

A. That has nothing to do with it. For instance, you mean to say I would not be permitted to charge that up as expense, what difference does it make whether we charge it as operating expense or added to stumpage and charge it out next year.

Q. You know the stumpage has been steadily going up?

A. No, it has been going down for the last year.

Q. You take over a period of ten to 15 or 20 years it is steadily going up?

A. It would have to. If it didn't double in value every ten years the fellow who held it would be losing money.

By Mr. Balmer:

Q. You are doubling it?

A. Nearly.

By Mr. Da Ponte:

Q. These prices of yours gives it to you twice?

A. You are making a distinction between the Northern Pacific and its old stumpage and charging us increased prices to us who are operators. You are the speculators.

By Supervisor Spinning:

Q. You are in a business engagement up there and you have over 700 thousand dollars in it. On what basis do you determine the merits of your enterprise? Is — upon the income on that investment? [fol. 1159] A. Surely, it is upon what we can get out of it, by taking the raw material and dividing it into logs and getting it into the market. We are not speculating in timber. If we were we would not be able to keep it up.

By Supervisor Spinning: What rate of return have you been getting from your investment the last two years?

A. We have only been operating one full year and we started with an investment of $700,000, or really over one million dollars. We had, after we paid taxes about $80,000 profit last year, and in our operation this year so far we have lost about $65,000, so we will not be in a position to declare any dividend for the first two years.

By Mr. Da Ponte:

Q. The first year he made a profit of about ten per cent. Manifestly supposing he owes a million dollars carrying charges at six per cent or $60,000. This year he has got to cut ten per cent and he has worked out that much. Next year his indebtedness is reduced but he still continues his carrying charges or ten per cent less. When he cuts his ten per cent he has only $54,000 to charge against that. You simply accumulate profits and when you get through you are done, because when you cut this ten per cent he hasn't got the charge against that but five or six thousand dollars. Take the Weyerhauser Timber Company—they put five per cent on stock and it sells for $300 a share, and it is stated to be worth twice that. Why? Simply [fol. 1160] because as they work out they will get all the velvet, perfectly plain.

A. The Weyerhauser are not operators in timber. It is true they are interested in an operation or two where their holding has been combined with others. But they are not operators. They are timber owners and speculators. We are operators. This is the history of the logging business that the average logger in Puget Sound has never been able to realize enough from profit on his business to replace his equipment. Our operations are situated in a body of timber containing approximately a billion feet. It lies behind us and we begin at the front door of the situation. As fast as we cut off and sell stumpage instead of reaping a harvest we are getting up back into more timber, or else we go out of business with an enormous amount of equipment which has to be wrecked and there is a condition which is different between the man buying timber enough to justify him to go to the great expense of developing it, and the man who is holding it for speculative purposes. There is not a fair comparison.

By Supervisor Spinning:

Q. Is it your intention to log this timber off in a business like way, and you must prepare for years ahead in getting out that timber?

A. Yes sir.

By Supervisor Spinning:

Q. It cannot all be marketed at once and still it must be maintained by your operation?

A. Yes sir.

[fol. 1161] By Mr. Henderson: When the railroad first came into this country they did not have much traffic. They charged just the sum of their taxes and all the other charges?

A. Yes sir.

Q. They built terminals to last ten years and they had an investment ahead of them all the way through and carrying charges each year until they come to where they did get some money out of their investments in terminals?

A. Yes sir.

Cross-examination.

By Mr. Dudley:

Q. I understood the equipment of your cars with patent bunks cost you about $29,000?

A. I got a 100 sets when prices were higher than ever before, and I paid $250 a set for them spot cash. I paid freight on them from Seattle to the Great Northern shops in Everett and then paid the Great Northern for placing them on the cars; and I figure that freight and all got me in the neighborhood of $27,000 for 100.

Q. About what did it cost to put them on the cars?

A. That depends on the facilities somewhat. If you can pick them up with a traveling crane and place them on the cars I suppose that it might cost you perhaps $2.50 a car. Not more than that. Mr. McDonough can tell you that better than I can.

Q. You installed some of these bunks yourself?

A. Yes sir.

[fol. 1162] Q. About what did that cost you?

A. I did not keep tract of that because we switched the car down there and we had a little jim pole and chain blocks and it is all done by blacksmiths in connections with their daily work. We got a car in today and the first thing I knew they had a pair of bunks on it.

Q. The installation in use on the patent bunks decreased the cost of operating the car to the logger?

A. I think it does, by the wages of stake cutters and the amount of timber consumed in making stakes. It decreases your freight and it enables you to more nearly approximate the minimum weight because you will get five to 700 feet more on a car. But my principal and prime reason was perhaps to have these cars assigned exclusively to my service so I could be sure of a car supply.

Q. You never made an estimate of the cost of equipping a car with stakes and labor and material?

A. Oh yes, I have. I have figured it out a good many times. We put many of them on when we were operating on your road, about half of the cars were turtle back and about half of them stake cars.

Q. About what did it cost approximately?

A. I should say that there is 40 feet of very choice lumber in a [fol. 1163] stake that would be worth in the woods, delivered there, at least $10.00 a thousand, which would be about 40¢. Then you would have to use blocks with those stakes and it probably takes an equal amount 40 feet more lumber—that would cost the trade another 40 cents and the labor of the men would perhaps equip 20 cars a day. He gets $3.00 to $3.50 per day. That would cost you about 15 cents a car. If the figures add all up it would cost you perhaps 75 cents a car.

Q. That includes putting the stakes in the car or preparing them ready for installation?

A. That includes putting them into the car.

Q. Then there is a time loss in the expense of cutting the stakes to unload*ed* the car?

A. That slows up the operation of unloading, slows it up materially. If you stop to cut the stakes—and unfortunately where we are shipping logs our purchasers refuse to cut the stakes, you tear the car to pieces.

Q. Then you don't lose time in slowing up but you lose money in repairs?

A. Yes sir.

Q. In your experience about what does it cost you per month to keep the bunks in repairs as they are damaged from time to time?

A. I cannot tell you that. I had a very pleasant experience with the Seattle Car Foundry Company from whom I bought the bunks. During my Christmas shut down they sent a repair force, sent three [fol. 1164] men with tools and extra wheels and made repairs on those bunks; put them in apple pie order, every bunk, and did not charge me anything—just a Christmas present. I have not done very much repairing since.

Q. Do you consider that there should be a difference in the rate charged where the car is equipped with patent bunks and one where a car is not equipped at all is furnished?

A. That is asking for an opinion and entering into the realm of speculation again. If I were a carrier and owned flat cars I certainly would not send them out to a logger until I had bunks on them.

Q. As a logger you have been willing to pay for the bunks yourself rather than to use unequipped cars?

A. Do not mistake this. For the sole reason that Mr. Jenks, Mr. Costello, and Mr. O'Neill altogether assured me if I would put bunks on the cars they would assign them exclusively to me for this operation and I would have them all the time. They did that and they even went so far—and I was willing to pay 27 thousand dollars to have those cars for my exclusive use.

Q. Was that to say that stalling stakes and damage to the cars etc.—you would be willing to pay something more for the use of the car equipped with patent bunks than a car not equipped?

A. No, not unless I could be assured of having a supply of cars all equipped with bunks. If they are not all equipped we have to use more stake crews and be ready to put stakes *and be ready to put stakes* on any of the cars.

[fol. 1165] Q. You would save annoyance and trouble?

A. You have to cut stakes. You've got to have the men and there is the trouble of the loading crews. You do not save very much with patent bunks unless all of the cars are equipped with them.

Q. You save the material on the cars equipped and also in freight?

A. You may save a bit of material. Your stake maker is stationed somewhere close to the logging operation. He has to make the stakes for that particular spur. He cuts them up a lot at a time. He gets through with that logging operation and when he gets through making stakes for that side he leaves the half cut logs by your railroad and you do not know anything about the size of the pile of stakes.

By Supervisor Spinning:

Q. Would you be willing to pay for these bunks and capital accounts for the reasonable return upon it?

A. Yes sir, if I can have them exclusively for my service and not be bothered with open faced cars.

By Supervisor Spinning:

Q. Would it be worth that much to the logging interests of this state to put them on as capital accounts?

A. Yes sir, at a reasonable price. But I think they can be installed for one-half of what mine cost me.

By Supervisor Spinning: What would that be about?

A. From $00 to $125. There is some testimony on that I think. [fol. 1166] By Mr. Dudley: I think it was $156.00 for the turtle backs. They are about the same.

By Supervisor Spinning: You testified as to the installation of brake staffs and brake wheels. Could this installation be made on bunks the same as on flat cars?

A. Oh yes, it is with bunk cars all alike. At a very slight expense that brake can be put where it can be used under the load. If the type of brake used by the Milwaukee is put on it obviates damage to the brake and it can be used under all circumstances whether the car is loaded or unloaded. On the great Northern cars 7/10ths of the load of logs ride on the brake wheel and you cannot operate the brake wheel. And even if you do, you've got to stand on the ground, and often if you are on the ground it is bent against the end of the log.

By Mr. Henderson: Considerable has been said about the so-called carrying charge including interest and taxes. I will ask you, assuming that you work that out, you would still have a loss?

A. Yes sir. If I did not charge it up to operation I have to charge it against staumpage and I am going up against constantly increasing cost of stumpage. It is bound to affect your profit in the business one way or the other.

[fol. 1167] By Supervisor Cleland: For operating revenue we will take $1,000. Your operating expenses are $500. Your operating expenses include maintenance and depreciation. Taxes come out $100 and interest on borrowed money $300. At the end of the first year your operating revenue is $1,000 and the total expense including taxes and interest $900. That would give you a net profit for that year of $100. Next year the operating expense remains the same, but on account of having reduced your holding your taxes and interest decrease, so your taxes are $90 the second year and interest $250. That would show at the end of the second year a profit of $160 as compared with a profit of $100 the first year. That will continue the same ratio until the entire tract is logged off, so that at the end of the period the last year instead of earning $100 as we did the first year you would earn $500?

A. Yes, sir that works out that way, but in eight years logging operation the fact is, it has not.

By Mr. Henderson:

Q. If you had not charged this carrying charge for the first year your interest and taxes on the remaining 9/10ths, whatever you would have paid out into that capital account would be the same?

A. Surely.

Q. So that at the end of ten years it would be the same. It would go again into capital account the second year, because interest and taxes accumulated the first year and were not taken out of operating expenses.

By Mr. Da Ponte: Your figure for the first year is absolutely misleading.

[fol. 1168] By Supervisor Cleland: If you handle it that way, it would make his profit remain constant. According to my figures it would make $100 each year instead of $100. the first year and $500 the last year.

By Mr. Henderson: You have to make an investment in the whole ten year operation before your investment for your equipment is justified?

A. Yes sir.

Q. When you get about half way through that operation you are immediately taking on in that same locality, or some place else another five years' investment, because the logger always figures he has to have so much timber ahead of him so you can get through, because you have always got so many years ahead of you.

By Supervisor Cleland: That is assuming that he is going to continue, but depreciation and maintenance of his equipment which he has there will be taken care of in the allowance for depreciation and maintenance in the $500 operating expenses each year, tho at the end of the period he will have repaid himself for the total investment and repay himself his profits, so at the end of the period he will be even.

By Mr. Henderson: There are only certain items depreciated in that manner.

A. As you extend further and further into that timber—getting away from all this speculative argument this is just real logging. We have got to pay taxes and we are in a situation where we have to pay a certain amount of interest, and if we do not make money enough to pay interest and taxes and meet our payroll and pay for [fol. 1169] supplies that we buy, somebody else will conduct the logging operations. Our books show what money we made, from whom we made it, what we pay, down to an infinite detail of what it cost, and we have got to meet these things to stay in business.

By Supervisor Spinning: The weak spot in this matter is that carrying along that timber for ten years ahead and paying interest on it.

A. What difference does it make?

By Supervisor Spinning: The only question is to justify the payments of this interest for ten years in the future.

A. Is not this justified on the whole proposition; the Federal authorities, both the Federal Trade Commission, the Income Tax Department say this is the only thing you can do and you must do this. I should think that a position of this kind taken by the authorities of that kind ought to settle the question.

By Mr. Balmer:

Q. Last year you cut 43 million feet?

A. Yes sir.

Q. This year how many million feet have you cut?

A. Fourteen to fifteen million feet but we will cut 14 to 15 million more.

Q. So will cut at most ¾ as much this year as last?

A. Perhaps about three-quarters.

Q. That bears out the inequality in burdening it with the rate of interest.

By Mr. Henderson: Is it not a fact that the railroad try to keep [fol. 1170] at least five or six years ahead of their interests, so if you are going to justify an investment in railroad to be ahead, you must justify the timbermen to do the same thing. The great howl by railroads is that they have not been able to get equipment ahead.

By Supervisor spinning: What was your actual investment there before you commenced operation?

A. Approximately one million dollars which we would not have spent if we had only a timber supply of 43 million feet. We could not have spent $367,000 in opening that timber up to get a road to the logs for that much. We have to have enough ahead to justify that initial amount regardless of the cost of the timber or how it is carried and no mill man will indulge in an enterprise of that kind and put in a saw mill unless the supply of timber there would justify the operation behind it.

By Mr. Horan:

Q. As years go by you are opening up more timber?

A. Yes sir.

Q. You are taking away the timber nearest to the tract?

A. Yes sir.

Q. Your main line will extend farther and farther into the timber?

A. Yes sir.

Q. The cost of operation and cost of producing your logs will increase?

A. It is bound to.

Q. Would not that equalize the difference in your company cred- [fol. 1171] iting this up against operating expenses with taxes and carrying charges upon this investment?

A. I think it will.

Q. Is it not part of the scheme of every logger to take care of increased cost of operation as the operation proceeds further and further from the starting point?

A. The higher the ground you find an inferior quality of timber. I explained that in detail this morning, what we were going up against as the logging goes farther back into the mountains.

By Mr. Henderson: I would like to get the question of carrying charges clear. Let assume you have a million dollars invested and you are paying five per cent on it. You compute the amount of interest you will pay. You charge one-tenth each year and you will get the same results you will get now?

A. Yes sir.

Q. The same thing they are contending you should do you will get back the same amount?

A. It doesn't seem to me—it doesn't make any difference whether I pay the money for donkey engines or for meeting my payroll.

Q. The contention is the same if you did that in a different method depreciated your interest charges out over a total of ten years, you would get a different result from what you are getting now. If you take the amount of interest you would pay in ten years, dividing it by ten it would be the same thing?

A. Yes sir. And then I would be up against the Federal Trade [fol. 1172] Commission and the tax department of the federal government. I am keeping my books according to their instructions.

By Mr. Da Ponte: I am not criticizing his methods. He will get the same thing at the end of the ten years. But when you pick out an individual it is misleading. When you take the first year, he shows a loss because he shows carrying against that; it is misleading. By his method he accumulates to the end of the period. In the other method he divides it through the years. So I am saying he is making a fictitious loss for a particular year.

By Mr. Henderson: No, I think you are not right. You pay five per cent for ten years, and will be so many thousand dollars. You divide it by ten, you will get exactly the same if you do distribute it one-tenth for each year——

By Supervisor Cleland: At the end of the fifth year he is only paying half as much interest.

By Mr. Henderson: Provided he has been reducing his principal. it is true, because he will still owe his 850 since he distributes it evenly.

By Mr. Balmer: You don't mean to say if he goes down to the bank and borrows this million after he has cut off $38,000 he is is still owing——

By Mr. Henderson: If he has repaired half of his capital he is still entitled to the interest on what he has repaired.

By Mr. Balmer: You cited certain figures as to the cost of rail transportation. Did this include federal war tax or transportation? [fol. 1173] A. Yes sir, our freight charge includes what taxes we pay.

Q. Taxes on transportation? There is a war tax of three per cent on freight charges.

A. Whatever we pay your station agent at Goldbar included whatever we pay.

Q. So I believe you said that on a public rate of $2.27 you made an outlay of $2.47 per car?

A. That is this year. Last year we paid $1.81 and it cost me $2.14, but at the rate of $2.27 it cost me $2.80. I explained my rates fell down this year because last year I was loading on open faced cars, and this year we have been compelled to approximate the minimum because we have not used open faced cars.

Q. The March figures you cite include then what you paid in war tax on transportation?

A. It includes your freight bills as they are sent up to us twice a month and if that is added to the freight bill it included it.

Q. How long have you been compelled to buy fuel oil at the price you quoted us?

A. Last year we bought $2.55. That price was reduced sometime early this spring to $2.35. We paid that for a portion of the time and then it was reduced to $2.15, and in the latter part of June we bought it at $2.15. The last contract, we got a further reduction [fol. 1174] until last Tuesday I got a price of $1.85 which I am paying now.

Q. That is only a very recent price?

A. I do not know when it went into effect.

Gentlemen, I want to personally thank this commission for being so extremely courteous and so patient with me on the dissertation on logging. I would like to direct the attention of the Commission to the fact that the Wallace Falls Timber Company was selected as a typical example of loggers and methods of doing business, the largest shipper over the Great Northern Railroad. I was necessarily put in this position because my company was selected as the goat.

By Mr. Balmer: Not as a goat.

A. But the one illustration, a specific example; specifically singled out by the railroad.

By Mr. Da Ponte: That is because you could defend yourself better than any of the others.

At this point a recess was taken for five minutes.

[fol. 1175] JOSEPH IRVING, being first duly sworn, testified as follows:

Examined by Mr. Henderson:

Q. What position do you hold with the Sultan Railway & Timber Company?

A. President and manager.

Q. Any other timber companies?

A. No, sir.

Q. How long have you been in the logging business?

A. Thirty years.

Q. Are you familiar with logging operations on Puget Sound?

A. I have been in that kind of work constantly.

Q. What particular locality are you more familiar with?

A. Seattle Division of the Northern Pacific Railroad mostly, and also with the Great Northern Railroad at Sultan.

Q. State the history of your experience, where you operated and over what carriers and in what territories.

A. About twenty-seven or twenty-eight years ago I was logging on the Snoqualmie river, river logging, and I finally went up with the old Seattle and International Railroad at Snoqualmie and after I had been there a year and a half or two years, the Northern Pacific took over the Seattle International and bought me with it and I have been working for the Northern Pacific railroad ever since. (Laughter.) About that time the Northern Pacific railroad, as I remember it, were the first to enjoy, or accept the practice of hauling logs from the interior to tide water; they equipped themselves with logging cars and they generally went after the logging business, if you might say it. They did not have me giving them cigars; they gave me one. We were partners in that game, and if they heard of any new companies doing business they came to the loggers and asked for it, and if they wanted help they came to the loggers for it. The superintendents of the Northern Pacific were [fol. 1176] very friendly and usually wanted to know what they could do for you to help you out. That went on as far as the Northern Pacific was concerned until about 1906 when we had the first embargo on log shipments. There was no feeling *feeling* with the loggers or shippers against the railroads. They realized that the business had grown so quickly that the railroads could not help it; we felt they were sorry they were in that position; they wished they had more equipment. We accepted a sixty to ninety days embargo, without any feeling against them.

Three or four years ago car shortages began to come again, and we ran across an entirely different attitude; we found for the first time in a number of years that they did not care so much about us. They began to talk about it being unprofitable, and they wished they did not have our business, and they did not act as if they wished they could give us any more cars. "We have 100 cars and we will give you your proportion"—that has been going on until this last—in the last year there has been very little business moving and we are

getting excellent service from the railroads. We are getting all the cars we want.

The Great Northern attitude was always different. The Great Northern wants and did not hesitate to say so, that they wanted to have all the mills up in the country—that taking logs out to some place might be taking logs from their territory, and they might not get the business out; that the timber was their timber; it belonged to them, and they was not going to have it moved out and somebody else get it. They receded from that position a little bit. It has been demonstrated positively and clearly that a modern [fol. 1177] logging camp equipped as it must be with modern machinery is an expensive proposition; it has always been recognized that a modern mill—you can not have a little sawmill at the end of some creek and cut out a quarter section, and move to another section; it was necessary to have modern mills, and they are built in the centers; towns have grown up from it. Everett, Bellingham—Tacoma was started from it, by big modern mills; people began to live around there and they attracted people and a payroll started, and some other industry, and it has all been built up from that fact. The railroads have begun to tell us they cannot haul logs for these prices, and that they have lost money. I am not a statistician, and I cannot say that that is not the case. Perhaps you have proved that you have, but if you have I do not know what is going to become of us. We cannot pass on an advance in freight to the mill, on our logs, and the mill pass it on to the consumer; that is absolutely out of the question; there has been a lot of talk by Mr. Da Ponte—I said why is it—the log movement has been as great this year as last year; our men said no; our men quote the figures of a number of loggers, the majority of them owning their own railroads. When I started logging there was practically very few loggers having their own railroads into tide-water. The Seattle Division of the Northern Pacific was busy with loggers, twenty-eight and thirty cars from the junction, and thirty to forty more on the Darrington Branch—a hundred cars a day altogether. These men after the shortage of cars began to look around and to get railroads of their own, and without knowing the increase exactly I know there [fol. 1178] is a good deal more than twice as many logs put into the Puget Sound District by railroads privately owned than common carriers. Every man here today who is a logger is one without doubt trying to get a privately owned railroad. I am figuring I am going to build a railroad from Machias tapping our timber on the Sultan range, connecting over your own road, and we cannot understand why the Northern Pacific won't give us a road. We are trying to get out; we know we can do it cheaper. Whether or not you can, we know we can. You might say, "What do you know about a railroad?" The loggers can answer to that that this industry is building twice as much railroad as the Northern Pacific railroad. I have built over forty miles in the last fifteen years, and every man in the logging business is building fifteen to twenty five miles a year. We need at Sultan twenty miles of railroad. They go through some woods, and I am compelled because of the conditions

we work under to do it very cheaply. If some one on my road would give me a haulage of seven dollars a car, or six dollars a car and give me ten cars a day I would take it and get out of the logging business. You might say, "Build your own roads." Well, now, just what would happen. The railroad companies have picked out the valleys, all of those companies. All the valleys, the rivers run up, and there is the place to build the roads; in building, you must locate the road with some method; the Stillaguamish river, up to Darrington, would not go any other way but up the Snohomish river. That is the only way you can build it. The Great Northern is different. It has a main line. I can easily see how the main line of the Great Northern running up there would be objectionable to hauling logs other than by themselves. It is their main line. [fol. 1179] I can see no objection to their turning the Concrete branch to some logger to go over if you cannot make rates we can live on. Give us a chance to operate the Darrington branch.

Mr. Daponte: That may be prohibited by law.

I do know this that people for instance up the Darrington branch say "Why haven't you been running?" The railroad shippers were doing the bulk of the business. Today the bulk of shipping is being done by operators who own their own railroads. I had no idea of anything like this. The logging business is a gambling business. He has to have a gambler's heart who goes into the logging business; he gambles first that his timber will cut all right, but no logger can tell whether it will cut all right. He gambles the road will not be hard to open. He gambles whether the market will be all ready; he gambles there will be no labor trouble; I have been willing to take a gamble, but I never gamble with the risk that the railroads make. I never dreamed of this. I thought that it was undoubtedly profitable; that they were certainly making money on my logs, and if they wanted to they could build a new chimney on the new union depot, and if Mr. Da Ponte wanted a new suit of clothes—I did not figure any of these things. We figured that the same reason that you was friendly with us—that was years ago—that would continue, with the idea of the long haul out that we were always talking about. And when I went up on the Darrington branch after I had been at Snoqualmie in a small way—I finally per*son*aded some people with money that I was a successful operator and if they would go in with me I would make some money. They invested with me and put in their money, and we talked to the Northern Pacific railroad. And the Northern Pacific railroad went [fol. 1180] so far as actually give us a contract, but they insisted that under that contract we must not build a road; and we would agree to give them all the timber we had, to carry on their road, and if we did not do that, the provision was they would cancel the contract. It also dealt with the places we would ship the logs; that was thoroughly understood. Mr. Grosscup was attorney for the Northern Pacific at that time, and he was always with us. It was "How are you getting?" It was that way until some years ago, all at once, I did not understand why—we do not stand together much, evidently. Something is wrong.

That is the history of the business, Mr. Henderson, I do not know anything else I can cover. They are getting the price up, but on the actual hauling of logs, I kind of wonder whether we cannot send them out by parcel post down here.

Q. Have you been keeping track of the returns you have been getting—of your returns for the last few years?

A. Yes, sir, but I have not the figures. I will verify it later if wanted. I never dreamed we were going to put in any exhibit of this kind. We did figure on having our auditor down, and he knows about my company. I thought that was about all we would do.

Q. Have you seen the figures Mr. Webb gave?

A. Yes, sir.

Q. Can you identify your company from those figures?

A. Yes, sir. He just gave figures of the general industry.

Q. He stated he had shown by camps and by numbers?

A. Yes, sir.

Q. Having seen your own figures, can you identify your number and tell what your return has been?

[fol. 1181] A. No. I could come near it, but I do not know that exactly. There would be some other so near I might be looking at that instead of mine. I know — certain logger puts in about 30 million, and by looking at this return I can get around to see that must be so and so—he puts in about 30 million feet. I am very anxious to see about mine. If his bucking and felling is less than mine, or if he is making a profit in the cook-house and I am losing, I want to know about that. This bookkeeping, this was started three years go. We decided we were fooling ourselves, that is all, and we have agreed to scientifically make a science of logging. Logging was done in the early days with oxen and then horses, and then some horses and some oxen and then donkey engine, and it was pretty much a hit and miss kind of business. I met one of the loggers that did pretty well, and he said he did not know how; he made some money is all he knew; that was a good year, but his costs had gone up and he did not know it.

Q. A good deal like the railroads, they——

A. I do not know about them. I finally got a meeting of one and another to talk our business over and it was decided that if that man made some profit on his boarding house we would go and question him, and we found he did not keep his accounts like we did. He did not charge anything for fuel, and he did not charge anything for the donkey doctor that fixed up the water pipes and installed them, or for the man that carried out the cinders, and other things; sometimes the stated price of logs was less than it actually was, and I said I did not sell my logs for that price; and we decided to go around and find out and keep accounts, and those accounts were all to be kept by a man that was engaged for it and it was thoroughly understood, and that has been our only reticence about furnishing [fol. 1182] accounts. Mr. Murray, down at the loggers' conference is a member of our association. Mr. Plumer may have sold Mr. Murray some timber and Mr. Murray told him 30 million feet, and the figures he got showed he got 33 million feet—and that is the informa-

tion you are not interested in. We are a lot of private corporations and not public utilities, and I do not believe the Northern Pacific railroad is entitled to the information; we are not selling the timber. I expect to see Mr. Plumer on the way back and try to buy some timber from him; if he wants the same price as five years ago I will say, "How about this railroad freight." I know very well he will not say that has nothing to do with him. I think it is worthy of—worthy to consider whether it is worth that, and maybe I will buy it and maybe I won't, but to give people selling timber to us, all the inside information of our own business, I do not believe they are entitled to it.

Q. Can you state approximately the amount of return you have been making for a period of years in your operation?

A. I was in a very small way logging until about 1904, and all the money that was made was two or three thousand dollars a year, and that was a big lot of money then; and the first real profit I made was in operation on the Northern Pacific at a place called System; we were so very successful with our profits on that job, seventy thousand dollars, that we finally got Mr. Thorne of Tacoma to loan us a lot of money to buy a lot of money, and in 1905 and 1906 we were very successful again.

Q. Did you contract to build a road at that time?

A. Yes, sir, for all the timber on the Darrington branch, any timber we had or might have; and on that agreement we must not [fol. 1183] give shipment to anybody else. The forest embargo came about then, and the banks issued scrip and we had a financial panic. From then on I got to be quite a logger and I put in 97 million feet on the Northern Pacific in one operation a year or two after that, about 1909, and we kept on in the very best body of timber in that section of the country. We met conditions and a low log price and during ten years all told lost $97,000. Every year had not been a loss but there had not been one year of any profit to amount to anything. In 1909 we made $17,000; in the following year we lost $24,000; for the total number of years it was loss and there has been no profit in operating in my company until year before last when we made some small money, and last year we did very well to pay off the bills we owed. I can walk along the street without being afraid of the sheriff.

Q. You operate over the Great Northern and Northern Pacific both?

A. Yes, sir.

Q. What is your rate on the Northern Pacific?

A. I have a twenty car rate of $1.565.

Q. What is your rate on the Great Northern?

A. $2.065.

Q. Do you know what is your actual transportation cost this year?

A. I know it by looking over Mr. Webb's statement, $2.14.

Q. On which road do you do the most shipping?

A. This year on the Northern Pacific from Oso.

Q. Then your average rate on two roads would be $1.81, and your actual transportation $2.14.

A. Yes, sir.

Q. I wish you would explain the proposition of the logger, giving consideration to his raw material, in his accounting system.

A. Regarding the cross examination of Mr. Frost?

Q. Yes, sir.

[fol. 1184] A. I tried a number of years ago. I am doing exactly the same thing as Mr. Frost, absorbing the tract in logging, counting that as part of the cost of the operation. A long time ago operating that kind of a tract, we thought we ought to keep the tract separate, and I was rather anxious to do that because I was anxious to make a showing, and we were losing; that looked pretty good to me. Without going back, we charged off three dollars stumpage, because where we bought some timber—I bought some from the state that cost me $3.56. We absorbed the $3.56 on that tract but on the rest of the timber we owned we charged out an upset price of $3.00 which prices we arrived at with the government as to that upset value.

Q. You could sell it for that?

A. I would not want to. I was offered $3.00 for this tract of timber in 1907. Put to me I would have sold because I had not put any money out and it looked like getting some money, but my partners did not want to and so we did not sell after we made the upset price of $3.00, but we had three tracts, North, South and East tracts. The East tract was a very small one at the station Irving, called after myself, about 65 million feet. Logging had begun to go down. So we carried it on the books at three dollars. I had to do some work on those tracts. For instance fire season came around and we ought to have a fire patrol; there were men cutting nearby and we went down to see if they were trespassing, and when a fire occurred we ran up a bill of two to three thousand dollars for fighting fire and we charged it to the tracts, and interest, we charged to the tracts. I went along on this line, logging 65 million feet. One fine day after three or four years, partner say he believed the timber was worth $3.60, that it was on the books for that. He said, "You have okeyed all these [fol. 1185] bills charged to this tract and it is $3.60 now." I said "I cannot help it. It is only worth three dollars." I said it was only worth three dollars, and charged off the sixty cents. It was not an increase in value, only expense. I said, those bills have piled up against it. We finally adopted the practice of making our timber land one bunch and putting it in one bunch and carrying taxes and interest in one book. We have since put them all in as one operation. If we had charged something against the operations ten years ago when we did not, we would be making more profit now.

Q. When did you begin and cease operations in 1920?

A. I have two camps you know. I started the Sultan camp on the Great Northern on February 2, and closed it down January 12, 1920, and did no more operating at Sultan that year. I started the Sultan operations in 1921 on 23rd of April, and closed down June 30, and started up again September 2 and am now running.

Q. In 1920 did you run at all after June 12th?

A. No, sir. Closed down all the rest of that year.

Q. In Great Northern Exhibit 21, with reference to car repairs from June 15 to October 7, 1921, you were operating during that period only five days in June and then began again in September?

A. I commenced April 23, and ran until June 30th continuously and then commenced September 2 and have been running ever since.

Q. During that time where were the cars with which you had been operating?

A. The actual cars that we have been operating—it would be hard to say, because they could be moved out, but it is not probable when we closed down our camp. The only movement has been by the rail- [fol. 1186] roads. There has been very little movement of log flas and the consequence is that the Goldbar spur just above me and just below the Wallace Falls and our own too was loaded down with flat cars put in there for storage; some of the cars we had been using and some of them cars we had never handled I think—every flat car the Great Northern had. I do not know certainly, but I think I saw them all. Those carse were stored in there. It could have been possible in the shut down. I was only in the yard from time to time, driving up there, but the yard was stored full of flats, and it could be possible they pulled a string out and next day put another string in.

Q. The cars are supposed to be inspected at Everett before they are sent to your tracks?

A. When we are running, yes, sir. But in this case I cannot say. We have a big storage and they knowing we were not going to run, as cars were coming from the East, why not put them on storage? So in that case they would not be inspected; they would come from the East and be dropped and shoved in the yard there.

Q. Are any of the logs you shipped handled by exclusive log trains, from Sultan going to Everett?

A. Are you talking of the Great Northern?

Q. Yes, sir.

A. The Great Northern at the commencement of our operations in 1920 were very short of cars. I must compliment Mr. McDonough on the way he handled it. I said, What will you do with the new man Frost? He says, "I don't know." I says "What are we going to do?" He says "How many cars do you want?" I says, "Thirty-five." He says "Frost wants thirty five a day, and" he says, "I have [fol. 1187] just got seventy-three cars in service." I says, "I do not know what we are going to do." I tried to use what influence I have got. I says "Don't priority amount to anything? I have been here all these years, and he is just breaking into the game." He says, "Those cars have got to be divided." I says "How?" He says "On the requirements." I says "I want four hundred today." He says "That cannot be done." I says "What are we going to do?" He says "I don't know." I said, "Look here, I do not think that man Frost can load thirty-five cars and he is just anticipating a little bit." I says "You just go to work at night and divide those cars evenly and give me and him the same number and then tomorrow night when the train comes down—" I says, "By the way, you could put on a logging train with seventy cars a shift?" He did not

know. I said "You have got to do something, we cannot run short every day." He said he would do what he could and he finally agreed to put a logging train on and it was wonderfully handled I think—shows what can be done. I said, "I tell you what to do, you divide those cars evenly and tomorrow night you give to the camps according to what you have got. 'You give us cars in proportion and if Mr. Frost has 35 and we have, you give them.' And I says, "I will see that we get all my cars out," and he said "We will do something to try and help you." And we got a logging train. I telephoned up and said "If you leave one single log in the woods I will kill some of you. We got a good train and I went to work and told my bucking men they would have to work at night, and we got torches and we got headlights and put them on and we worked at night and they unloaded at the dump. We got seventy six cars to start with and afterwards we got a few more and we were able to run [fol. 1188] that service and get an average of sixty-five to seventy loads a day and move them a distance of twenty miles there and twenty miles back and have them unload the same cars, or ninety per cent of them, unloaded the same day.

That shows what can be done if the railroad superintendent will try hard enough.

Q. How long did that continue?

A. Until I closed down the twelfth of June.

Q. You commenced in April or May?

A. Whenever Mr. Frost started in.

Q. From that time the exclusive log shipments in trains stopped, did it, from the time you closed down?

A. My interest ceased then, so I do not know. But I do know that the story of the mixed trains—I have seen them run mixed trains. They run mixed trains. Right today Mr. Frost is getting out twenty cars a day and I am getting out twenty four to twenty six cars a day and they run mixed trains. They may have had a good logging train on there yesterday; before we came to this meeting it was done.

Q. In 1920, had you had cars, would you have been able to get out substantially more cars than you did?

A. At that particular period we had a little—the logs were short and they were picking up logs pretty eagerly, but I was in a large body of cedar and the cedar business began to fall off and it would not have made any difference if they gave me a hundred cars a day—I closed down because of the market.

Q. In 1920?

A. Yes, sir.

Q. What has been your general situation with reference to your ability to get cars outside of that?

[fol. 1189] A. To go back to this log train. Mr. Frost has just opened up a new tract of timber, starting right at the front, where I was fifteen years ago. I started at Sultan junction and I am now hauling the logs over twenty miles or even a greater haul. It was easier for me then in that way; it is easier for him to get cars a mile and a half to his operation than I could get them for twenty miles.

My train service takes up eight cars. I have a big ninety-ton locomotive and I have an eight per cent grade and considerable 25 to 30 degree reverse curves, and can only push eight empty cars up that hill. To get 20 cars up in the woods they go to work at eight o'clock in the morning, twenty miles away. I went to work and built a cabin for my train crew and stationed my train crew down at the junction to live there and wake up and go to bed whenever they desired and leave whenever it might be, four or five or six o'clock. As soon as the train came along they would couple up and get the cars up into the woods as quick as they could. That locomotive had to take cars up all morning. We could not operate three sides at once, with eight cars, which is all my train could bring up, and by the time they got the second train up, some side or other is not working; did not get to work at eight o'clock, and by the same token at four o'clock in the afternoon when we have to shut down to take the loads out, some side was not switched yet. While you might say my train crew has nothing to do from ten o'clock in the morning until five at night, they do double work; in other words, running a logging railroad; to do it properly if your capacity is eight cars you ought to bring eight up and go back with eight loads. They were making me do what they would not do themselves. McDonough would [fol. 1190] have said we will go up with cars and bring back the loads. I had to go down with the loads and next day take the empties back, because I had to keep cars moving. That meant an extra expense of about eight hundred dollars a month for extra wages of the crews, but we were very glad to pay the eight hundred dollars to get the service.

Q. Can you load your maximum capacity of cedar?

A. No, sir. And I am taking an entirely different position from Mr. Frost. His experience has been here in smaller timber. All my experience has been in bigger timber. We have always climbed the hill. Sometimes in Oso and at Sultan in large timber but principally the large cedar in Sultan we bring in cedar logs there that contain 3,500 to 4,000 feet to the log and in every day's operation at each landing we pile up, in other words we bring in a log and if it stayed intact it would scale 4,000 feet, but by the time we take the log out it goes to eleven pieces and if nobody knows how to do it it goes on three cars; you can pile it on three cars if you do not know how to work it. We smuggle those pieces in on loads of good capacity; we have got big logs with 8,000 feet, so we hold back these chunks and pile a chunk on top of this load, and the next load we pile a little on. But at the end of the siding, of the half day, we still have a landing full of split cedar and there is only one thing to do, pile it on the best you can. That load only contains 4,000 feet. The rest of my cars have eight to ten thousand feet and this one only 4,000. They have had cases of 3,000 to 4,000 and taking the train as a whole it has averaged 8,000, and yet I am penalized for three or four cars which I cannot help. It was the way the trees grow [fol. 1191] and I don't want to break them, but to get these trees out, they are all good timber, some of them for shingles, or lumber, we have to pile it this way and in small loads.

Q. You spoke of fire hazard. I suppose wharever expense you have during the year in operation for fire protection you charge to that year's operation.

A. Actual fire loss of the year.

Q. Or cost?

A. Yes, sir, that goes on the payroll of the month it was done.

Q. Is there anything else you happen to think of with reference to the logging business, this situation as it exists, that you would like to testify about that I have not talked about?

A. I would like to speak about the bunk question. It is absolutely a known fact that for a car to be equipped with a Rainier bunk or a bunk of that kind is a great saving to the car, and cannot help but be. I was a witness some years ago in the Federal Court; the owners of the turtle back bunk in Tacoma were sui*jg* the Seattle Car and Foundry Company for infringement on the patent bunk they have got, and the owners of the patent bunk, Mr. Shields an*d* old friend of mine, conne*d*ted in some way with the turtle back people, had me subpœnaed and at that case all of the experts of the Northern Pacific Railway were testifying as to the value of the car-bunk and they were telling exactly what their experience had been and the number of years they had used them, and using master mechanics and all the men of the Northern Pacific telling what their experience had been before they got bunks, and what a saving it was, and I think it is a crime to allow——

Mr. Dudley: I desire to object to this hearsay testimony.

The Witness: This is not hearsay. I was there and heard it. (Laughter.)

[fol. 1192] The Director: The Objection is over-ruled. The carriers, maybe, tried a declaration against interests, but they take the position that the bunks are an economical thing.

Mr. Dudley: We wish to reserve an exception.

The Witness: This was proven right through, the value of it, and they finally sued the companies. But regarding the Great Northern; it is notorious that the Great Northern flat car equipment is very far from fair. It is notorious. Every railroad man that knows about it will say so. Every superintendent of the Great Northern railroad for the last fifteen years, and I have known them all, it was going to be his main object to see that we got these bunks, and the vice president, Vice President Mr. Jenks, before he got to be vice president, told me he had a car equipped and kept track of it and I could be sure I was going to get those bunks, and just before he got this new office I heard of it and I congratulated him and I said "These things come home to roost—you are the man that says it." And he said "I do not know what to do; there is opposition to it on our people's part, but we will do what we can to get you those bunks."

The history of those bunks!

I contracted with the Northern Pacific for 125 bunks, to be paid for at the rate of fifty cents per car loaded. I have paid for them and the railroads have saved up—they charge up the difference their cost to put the bunks on until two weeks ago—I think this is a case of

where people did not know the value of the item. I concluded that the Northern Pacific having collected my money once was deliberately selling the bunks over again. I got twenty empties, of ten [fol. 1193] gravel flats and ten bunks, and I felt that if I had paid for those bunks and they gave them to somebody else they were collecting money that belonged to me; I paid for them. Mr. Judge Reed told me the other day that it was absolutely wrong I did not have these bunks; that it was unfair for me to use ordinary commercial flats, and he would see that it did not happen again. Since then it has not happened again, I think. I did not go to the road again about that. I do not believe the road was trying to get my money twice. You may say Mr. Frost has put on bunks. What position would you be in. Within the last two weeks—this is not hearsay—I am saying this, the man that told me was Milo Stevens, president of a logging company—said he did not always use the Great Northern for shipments; he is shipping over the Milwaukee; he says he ships over the Great Northern when he ships to the mill, but when he ships to the boom he ships by the Milwaukee I said "what became of those car bunks?" He said he got fifty. "You got fifty bunks?" "I wonder why you could not make an arrangement for you to give an order to the Great Northern to give me those bunks?" He says, "you can have those for nothing as long as you need any." I said "The Railroad can't object?" He said "No." I saw an official of the Great Northern railroad and asked if I could have those cars for shipping our *l*igs. He said to get an order, and it would be all right. I got an order, but that is two weeks ago. I said, "Where are those bunk cars?" He bunked those cars. Why wouldn't I be in the same position? Why should I have some equipment put on his property? I can not have any say about it. It bel*l*ongs to him. He would say, if you are not using it I am going [fol. 1194] to load this with bridge timber and send it to some other place. If you come with an order for those bunk cars they are off at Glasgow Montana or some place else. That is the history of what we get. The cars should be bunked, as part of the equipment. We certainly ought to have bunks, that is all.

The Great Northern, with its side brakes; I never saw one before; never knew there was such a thing; I never thought there was such a thing as a brak- half way down the side of the car. I have loaded millions of cars—there is no possible chance, it is absurd to think of loading a car with that brake there. The Great Northern says—it ought to be proven—that they can not put on a brake like the Northern Pacific. If so, if there is a law against it, if so, how does the Northern Pacific and the Milwaukee get by it. The Northern Pacific car has always been a good car. There is a growth sometimes on the butt of the log and the car will swing around and damage the brake, but with that exception there is no trouble that occurs under a load at our dump.

With regard to time: Mr. McDonough says it takes six and a half hours to go two miles with those cars; I do not doubt it, because he says so and he ought to know, but I would be ashamed to admit it if I was him, to admit it took him and my train six and a half hours.

He said the tide is not in. It would be just as reasonable to go to the Northern Pacific at nine o'clock if it leaves at three, and say it takes eleven hours to go to Tacoma. They would say, "Why didn't you go when the time came. There is a time table stating when the tide is high. He ought to say, to the train crew there is no use of [fol. 1195] your going at nine o'clock. Go when the tide is in.

He says the Northern Pacific is there: You both have switch foremen; can't these switch foremen ask these switching men when they are going to be through? What is the use of going down there and trying to push both in there? Why can't one phone and say I am going down at nine o'clock, and the other say "I will go at ten"?

It is a fact—I go to the dump three or four times a week, and there is the other crew waiting around. There is no need of it at all, absolutely no need of it.

Regarding stakes! The Great Northern cars are staked; we pay for them. Years ago when the Northern Pacific—it was big business, and you had no bunks—I kept track of stakes. I had stakes cut by the piece. I bought ten to fifteen cars of stakes and delivered them along the track, thee safe as ties, from three to four and five cents apiece. That was the figure then and we never figured it since. It cost ninety-six cents a car for stakes, the use of the logs they consumed. Logs at that time were eight dollars, though of course they are worth more now; and wages were then only three dollars; stakemen used to get three dollars. The Great Northern came down with our train load of logs from Sultan; it is staked and blocked—cheese blocks. Daugherty said they did not use cheese blocks, that there is not any need of cheese blocks in small logs; but a big log has to have cheese blocks. A big round log won't rest against the stake, but the jarring would be sure to break the stake; the stake is not strong enough. The cheese block rests against the stake and the cheese block keeps the log from rolling out; it keeps the log from rolling. When it comes to our dump we have got to [fol. 1196] cut these stakes; we cannot cut them all off; the man would have to have a flying machine to get out of the way when the logs started; he has to get out some way. He takes some out if he can, and then cuts some of them out sufficient so he thinks they will break. Take a big log and the cheese block—we have to roll it over these cheese blocks. The pressure of the log is against the cheese block and we have to force it over the cheese block.

We can unload Northern Pacific cars at the rate of about thirty-five to forty-five an hour. Our train load of logs from our Sultan camp will take us two hours. There is no need of their being there over two hours. The switching engine does the switching on the bay and drops back to the back of the train and does their other switching and on the way back takes out their empties.

Q. Do you ship over the Northern Pacific?

A. It is under lease to the Sultan Railway & Timber Company. The dump proper was owned by the railroad. The dumping cranes are owned by the Sultan Railway & Timber Company.

Q. You have leased the dump?

A. Yes, sir.

Q. So that on the dump proposition, aside from what you pay for the lease and your own expense of dumping, you do not pay any dumping privileges up there?

A. No, sir, it is our own dump and I employ the men to do the work.

Q. Do you know what the price of fuel oil is?

A. I am paying $1.85 now.

Q. Where is it delivered to you at $1.85?

[fol. 1197] A. At the Standard Oil Company's place at Richmond Beach, or Willis Point, or Metum, I think is the name.

Q. A point on the coast between Everett and Seattle?

A. Yes, sir.

Q. How many cars at a time can be unloaded on the Northern Pacific log dump?

A. About sixteen. The dump itself and trestle will hold between forty and fifty cars. The immediate dumping place is about fourteen to sixteen cars.

Supervisor Cleland: How do you move the cars up to the dumping place?

A. They set them there.

Supervisor Cleland: The switching engine sets in forty-car strings. If the switch engine went away how would you move them?

A. If there was a short string we could move them. For instance if they put in only eighteen to twenty we could pull the empties and loads up to the place, but if there was more than that they would have to wait for the switch engine to spot them.

By Mr. Balmer: Where do they cut the stakes?

A. Just before they get to the dump they wait at the place—it is wide—and wait for them. They hold them on the trestle and back into the passing track, and they cut them half way through and put them on the dump.

Q. Does he go along the whole train of sixteen cars and cut stakes on all of them before they move in?

A. He cuts twelve to fourteen.

Q. Before they are put on the dump?

—. Yes, sir. The last time the operation was this. The Great [fol. 1198] Northern backed in with about 22 loads and they cut fourteen to sixteen stakes, and backed them into the dump and went away.

Supervisor Cleland: What did they do with the other eight or ten?

A. Waited until a switch engine came.

Supervisor Cleland: What about cutting them—wait there?

A. They had to wait, enough for the man to get out of the way.

Supervisor Spinning: What is the difference between the time in dumping cars with bunks, or stakes?

A. We can dump easily forty cars per hour with patent bunks and we have quite a lot of difficulty in dumping twenty four in an hour and a half with stakes.

Supervisor Spinning: Any hazard attending the preparation for dumping cars with patent bunks?

A. None whatsoever. It is on the safe side always.

Supervisor Cleland: Does the hour and a half required to unload cars with stakes include the time spent in cutting the stakes?

A. Yes sir; we get right on quick and cut them, to facilitate unloading; put three or four men on.

Supervisor Cleland: That is what consumes the time, cutting stakes?

A. Yes, sir.

By Mr. Henderson: With reference to the damage to car, the comparative damage to the car with stakes and with bunks, is there any difference?

A. Yes, sir.

Q. You have a photograph illustrating the difference between the two?

A. I have some that were taken a long time ago; they would not quite apply.

Q. Explain the difference.

A. We unload with an unloading machine, exactly the same ma- [fol. 1199] chine exactly as Mr. Frost described; we put a line under the logs pretty well up in front and tighten up the line and cross arm is pulled up and it shoves the logs out. If a flat car is used there is no chance to get a line under it and it is necessary to hook on at the end, where we can roll the outside log out, and that does let the log under drop down to the flat car, which it would not do if we could get a line under it.

Q. With reference to stakes; supposing a stake has not been cut sufficiently to break in the operation of handling, then what happens?

Q. We would pull a socket of the car out, or if the pocket was good and strong it would pull the side of the car out.

Supervisor Spinning: The question was as to the difference in damage of the two operations. In what way do they damage the car with bunks?

A. A car equipped with Seattle bunks or the Rainier bunks, we just trip the bunks in proper shape; we ought to have practically no damage whatever to the car.

By Mr. Henderson: With reference to the hook and cable on to the brow?

A. We have got the same thing, brow skid or brow log. It is put as close as we can make it to the car and allow clearance to a man stooping on the empty car. This device is a traveling crane and the end is put into the brow skid and underneath the log; to say that it never happens I would not say because the car shows some one has hooked into that front once in a while, but usually the practice is to hook into the brow log.

[fol. 1200] By Mr. Balmer:

Q. You quoted a figure of what it cost you per car for stakes some years ago. When was that?

A. Long time ago, about 1909 or 1910. We were loading a great many cars on the Northern Pacific, getting out forty or fifty cars a day, and had no bunks.

Q. You figured the cost at fifty or sixty cents per car?

A. Ninety six cents.

Q. At the present time do you figure the cost per car is more than that?

A. Oh, yes, it must be at least twice. For instance, I could not get anybody to make stakes per thousand now on the track.

Q. The difference per car in value of car to the logger as *getween* one equipped with bunks and one which he had to stake would be about a dollar or thereabouts?

By Mr. Henderson: We object to that as immaterial. We contend the car should be equipped for the purpose for which it is to be used. The cost is immaterial.

Objection over-ruled.

A. It would be about a dollar. If it cost 96 for stakes it ought to be equipped with bunks. If you could equip a car like the Northern Pacific did—it was then about a hundred dollars apiece, you could get your money back, and you were being saved on the car, and we were getting some advantage by having the car equipped as it ought to be—you ought to be absolutely compelled to do it.

Q. Conceding as all you loggers contend, for the sake of the question, that there is an advantage to the railroad in the use of a bunked car, I would like to inquire what, in money, the use of a bunked [fol. 1201] car was worth to him per trip, and that is why I ask the question; I do not mean to say there is to be an addition of a dollar per car trip, but I want to ask the question, considering the question from a logger's standpoint, would it save a dollar per car by having the bunk?

A. I said it would cost ninety six cents a long time ago and it would cost more. An advantage to the logger if he is doing the unloading? It certainly would.

Supervisor Spinning: Your question relates to the stakes and the extra operating and all elements in unloading?

By Mr. Balmer: I was basing the question on just the elements that Mr. Irving himself had mentioned. I understood in his testimony there was some unascertainable elements of expense.

Supervisor Spinning: He just testified it took longer to handle a certain number of cars than with bunks.

Q. I understand from your testimony that in general, you have no difficulty in loading to the minimum of 7,000 feet per car; that your cars would average well above 7,000.

A. Yes, sir, I mean in every day shipments. I have not got the figures, but it cost me $2.14, half of it at $1.56 and the other at $2.06, of which a small amount came over the Great Northern. They would say to me it cost $2.20; that was the cost of unloading by two or three cars having only 4,000 feet although I paid for

7,000. 85% to 90% of my cars I can load above capacity very easily. If we do not do this 7,000 feet every time, if we can show you we can do it except in one or two instances, you would be getting your minimum of 7,000 on the average, getting your earnings that you expect to get.

Q. Does that figure you have quoted as to what your transportation cost per thousand feet has been, include not only transporta-
[fols. 1202-1277] tion charges, but also war tax on transportation.

A. I would think so, but really I do not know.

By Mr. Da Ponte: At the time you testified how much cheaper loggers could operate trains and make money, of course that contemplated you would have control of your business and make your rules and did not contemplate operating under the diztation of the government?

A. Yes, sir.

Q. And have the rules made by your employees?

A. Yes, sir, it would have to be done like we run the logging business.

Q. Which we can not do with government and union dictation by our employees?

A. I would think so. I think there is no doubt about that.

By Mr. Henderson: Do you think it is all due to that, or to inefficiency on the part of the managers of the railroads?

By Mr. Balmer: We have not made any suggestion that your loggers are not managing the camps efficiently.

A. I can easily see how a very *very* large system must have rules. I am the boss of my own business. No one can give me any orders. I can change them over night; if it is not working out I can alter it. I can easily see how a large railroad cannot willy-nilly over night do something different. We get exasperated over delays that look to us as if there ought to be no trouble to better. It is owing to the tremendous amount of business. To a small man of business it looks like he would like to run that, but that does not follow at all, and I do not think that, perhaps, there is any more inefficiency than if some of the rest of us had to do that work under that condition. We concede that the railroads are having a hard time with their employees.

(Evening recess.)

[fol. 1278] October 29th, 9.30 a. m. Saturday Morning.

Met pursuant to adjournment.

Examination of E. C. Richmond, continued.

By Mr. Welsh:

Q. Since we adjourned last night have you checked exhibit A?

A. I have.

Q. Referring to the error called to your attention last night, have you discovered that should be 10 instead of 11?

A. Yes, sir. Eighth line on the right hand side; it should be eleven thousand, instead of ten thousand.

Q. And the one right under that should be $11,688, instead of $11,604 and on the left hand side, line 9, should be gross ton miles and where it now reads $17.38, it should read $15.59, and the second line under that word net revenue per gross ton miles now reading $7.82 should read $6.03.

Referring to your exhibit A, I wish you would compare the revenue per thousand gross ton miles as shown by this exhibit as compared with the carrier's operating expenses per thousand gross ton miles.

A. This report brings out the earning per 1,000 gross ton miles of $15.59 and the net operating revenue on the same basis of $6.03, using Mr. Nicholson's statement of the division expense of $9.56 for each 1,000 gross ton miles. This I conceive is more favorable to the carriers than perhaps it should be, in connection with our operation. This operation is a round-trip deal where, in other words one crew takes out the empties, and brings back the loads, all within eight hours. There is no terminals as I have stated, used in this operation; therefore I am inclined to the thought that the actual operating cost of this operation would be much lower than the $9.56 which we have used.

Q. Referring to the summary. Take Exhibit B, under the sum-
[fol. 1279] mary. The average revenue pet net ton mile for 1920, on your exhibit in this operation, as compared with that of the State.

A. This exhibit covers nothing but logs; does not include the other traffic handled on this part of the road, only logs. And I find for the year 1920 an earning of three cents and a little more per net ton mile for logs alone as against an average earning per net ton mile of all traffic within the State of less than one cent, or 9.92 mills. The loaded car mile is 98.6 cents, whereas the average earning for the State of all traffic for the line was 24.2 cents per loaded car mile. I have had some figures there relative to the earnings for logs alone for the average mile used, in other words, taking the entire length of operation of 17.4 miles and divided the revenue, collected by the carriers by this mileage, it gives us a mileage earning or an earning per mile of line on logs alone for 1920 of $10,245, whereas the average mileage for all traffic of the State, of revenue was $6,764.80. I made no attempt to show what additional revenue the carriers have made in their other business other than logs, which of course has been material, for the earnings per mile of road would be much larger.

Q. By Exhibit D you have submitted the charge made for furnishing of patent bunks on those cars. I will ask you if you know what is the custom or practice of other roads as to making a charge, referring to the other three principal roads, as to making a charge for patent bunks, drawing your attention specifically to the Northern Pacific and the O.-W. I think the Great Northern has been covered.

A. The O. W. do not include any charge for the use of bunks in their tariffs. I believe Mr. Mount (?) stated, and their witnesses,
[fol. 1280] that the O. W. had generally equipped their cars in the log service with a type of bunk of their manufacture, in other words

a patent wood bunk and iron stake, and they make no charge for this stake.

Q. What is the custom and practice of the Northern Pacific?

A. The entire stake question dates back quite a ways. A few years ago, or before the turtle back trip came into use, or was patented, about every year somebody brought out a patent stake. Until the Seattle bunk was designed there had been nothing that the carriers felt had sufficient merit to attempt to put to general use. At the time the turtle back bunk was developed I believe that was done largely by certain logging interests who insisted on a bunk. They had become interested through their own actual saving in the logging operations and wanted to get them into general use. In time they were adopted by the carriers but in a different manner. The Northern Pacific adopted the plan of furnishing a bunk, but the logger paid for them. They made contracts with a great many logging operators for these bunks, at so much apiece, they being paid for at the rate of fifty cents per car until the total amount of the contract was paid, when they would have the use of the bunk through its natural life without further charge. Now the life of those contracts I believe was indefinite. In other words, they continued to run. These contracts can also be sold. The result is that the contractor who made this contract in the early days has long since finished paying for his bunks and he is now getting the bunk service without any additional charge. But the individual who starts in the business now, or does not have one of these contracts—I believe they are not [fol. 1281] making any more of them, is required to pay a rate which was formerly fifty cents per car, but in ex parte 74 was increased 25%. The Milwaukee handled their situation differently. I believe that they made one or two contracts and then realized that the matter or plan of contract perhaps is not legal or just. They thought the best plan was to spread the charges to one and all equally. I agree with that plan; if there is a charge to be made I think that is the proper plan. They started out on a basis of five cents a thousand which of course was slightly under the Northern Pacific; their rate was a flat rate of fifty cents using an average load of seven or eight thousand feet, and meant that shipping on the Milwaukee paying a less rate, would get a lesser rate in using the bunks; this rate, however, by the nature of its application being included in the rate, the Milwaukee issuing a rate for cars without bunks and then another rate for cars equipped with these bunks, brought about the question that in General Order 28, or the application of General Order 28 a possibility of increasing these charges, it was done. General Order 28 I believe is generally understood as applying to the rate only, and not incidental charges such as these, but there is a reasonable question involved there and the Milwaukee did make this increase. In ex parte 74 it was further increased, in that the user of the Milwaukee bunk cars are paying a rate of eight cents for the use of the bunks.

In our particular case we are rather smarting under this through the fact that in selling the cars which we mentioned last night, some seventy-seven cars, to the Milwaukee, they were already equipped with bunks, and we have still continued to pay for the use of those

bunks on the cars which we sold. This charge you will note in [fol. 1282] Exhibit D averaged for the year 1920 $58.35 per car.

Q. Basing your answer upon your experience and knowledge and observation, I will ask you whether or not in your opinion a car furnished to a shipper for the transportation of saw-logs which is not equipped with a patent bunk is in your opinion equipped with reasonably adequate equipment.

Objected to by Messrs. Balmer and Dudley, as a question of law.

Mr. Welch: That is an expert question absolutely.

The Director: We will be very glad to have the views of men who know something about these things. The objection is overruled.

A. There is no confusion existing I think in the minds of any one in the logging operations, either carriers or shippers as regards this phase of it. It is a tremendous advantage in time, safety, and practically any manner that you could think of; therefore it is obvious that unless a car is so equipped it is not only unsafe but it is expensive from a monetary point of view.

Q. Is it expensive to both the carrier and the shipper?

A. From a monetary point of view I do not believe that any one connected with the business would think for a moment of going back to the plain car, and as Mr. Dudley says, it is a point of law. I think the carrier himself is obligated to furnish a car suitable to handle the business.

Supervisor Cleland: In your opinion is a car not equipped with bunks an adequate logging car?

A. It is not, no, sir.

Q. There has been a great deal of testimony regarding the destruction of brake wheels and brake-staffs in unloading. You may tell [fol. 1283] us what you have discovered as to the number of brake-staffs and brakewheels and also include the wheels that have been broken on the overlapping—during the last year—just make it brief.

A. In the year 1920 the Milwaukee had no broken wheels in the logging operations occasioned by the dumping or the loading of logs. The matter of brake staffs and brake wheels is very well taken care of by the Milwaukee at this time. They are regular 42-foot cars, and have a brakestaff that will turn down to the side and the wheel therefore is seldom injured. Occasionally they will be injured or damaged. The seventy-seven cars which our folks sold the Milwaukee had a high brakestaff; until some time last year these staffs were allowed to remain of that heighth, and we were constantly breaking many brakewheels in hauling these cars, and bent many staffs, and we got together on the situation and found that we were violating no I. C. C. rule by dropping these staffs, and we did drop them to within five inches of the car floor. Your bunk extends to twelve inches above the car floor, according to the manner in which you mount it, and the result is we have very few breakages in brake-wheels or bending brakestaffs. That has brought down the cost of repairs materially; prior to this time daily there was a lot of dam-

age done and we feel that was occasioned by the brake-staffs being improperly placed.

Q. How many loads were handled during the year?

A. There were 14,448 car loads.

Q. And one sill broken?

A. Yes, sir.

Q. In your opinion is there any occasion for breaking the sills [fol. 1284] of any car equipped with bunks provided the bunk is placed above the bolster of the car?

A. No, not if you have an inclined dump or roll-way. It will free itself. I would like for the benefit of Mr. McDonough and Mr. McCaustland, who seem to have numerous and considerable troubles with their bunks—I understand they placed these bunks seventeen inches inside or towards the center of the car from the bolster. We learned long ago we could not do that without creating a shearing effect on the sill. Therefore, in placing the bunks, and this is done on the Milwaukee, we place the bunk immediately over the bolster. They remove the decking of the car and will put a plank either three or four inches, as a sort of cushion between the sill and the bunk. The bunk goes on beyond the fish bolt around the sill before placing the fish bolt. That distributes your load exactly over the bolster where it should be and there is no shearing damage done whatsoever. With a properly constructed railway there should be no damage on that car. I have often wondered why the carriers would operate over a railway that is not properly constructed. They should have a working standard of railway in their operations same as in anything else, but almost invariably a carriers' own railway is not properly equipped.

Q. Is there anything else I have overlooked?

Cross-examination.

Examined by Mr. Dudley:

Q. This dump is not located upon tidewater channel is it?

A. It is.

Q. Are you able to dump logs there at all stages of tide?

A. Yes, sir; we spent several thousand dollars dredging that within the last year.

[fol. 1285] Q. When did you complete this work?

A. I can not say just what month. I think it was a year ago this spring.

Q. And prior to that time was the unloading dependent to a certain extent upon the stage of the tide?

A. Yes, sir.

Q. At low tide you have to wait for the tide to rise?

A. Yes, sir.

Q. Those unloading operations you spoke of last year where you unloaded some forty or fifty cars in an hour and some minutes, was that one time you timed and watched the operation?

A. Yes, sir.

Q. There is some time lost and some cost in the operation of picking up the logs on the siding?

A. Oh, yes.

Q. So that there is a special expense in the initial and delivery movements of the logs?

A. Same as any traffic.

Q. Over and above the line haul movement?

A. Certainly there is.

Q. The shorter the haul the greater the amount per mile of that expense would be distributed on the line haul?

A. Yes, sir, that would be the result.

Q. Your haul is quite a short haul; first movement is 5 miles; from Firdale 8.2; from Sudbury your largest movement, 9.9 miles, and your farthest movement, Davis, 17 miles?

A. Yes, sir.

Q. So that distributing your initial and delivery cost per loads carried, would give you higher mileage cost than over a longer run?

A. Yes, sir.

[fol. 1286] Supervisor Cleland: The same thing would apply to any class of carload traffic?

A. Certainly.

Q. And when you use average cost per ton or per car mile of operation, if it is based upon a longer haul it is not fairly applicable to the short haul distance?

A. That is based upon your average haul within the state. I believe that is something like thirty miles.

Q. The exhibit shows 113 and a fraction miles. That is the report filed with the Commission, 113.2 miles, all freight?

A. That would make a difference.

Q. Applying the average cost per car mile based upon a haul of 113.2 miles would not fairly represent the cost of hauling five miles or nine miles?

A. No.

Q. Turning to your exhibit Number A, in the summary on the right hand side, you give the average revenue per net ton mile for 1920 as 6.003 cents. How do you get at that figure?

A. That is worked out on actual mileage per station, or by station.

Q. That is you have taken the ton miles and multiplied the distance for each station by the number of logs sent in from that station, or the weight of those logs as based upon your total board feet multiplied by eight as the weight of one foot?

A. I have used the eight pounds, as that is what we have since agreed upon as the weight.

Q. That would give you revenue ton miles, would it not, instead of net ton miles?

A. I believe the report shows average revenue per net ton mile. It means revenue ton mile.

Q. The word net ton mile would include the cost of transporting [fol. 1287] non-revenue as well as revenue?

A. I do not understand so.

Q. That is the way it is used in Interstate Commerce Commission and State Commission reports, is it not?

A. I could not say without having the reports before me.

Q. If that is correct would the net ton mile shown in your note A as 992/1,000 per cent include movement of non revenue as well as revenue freight, and your calculation which shows simply revenue ton miles or revenue ton mile basis, the two would not be comparable would they?

A. There would be a difference if the revenue tonnage were not included in that figure.

Q. As I understand the references you agree with the proposition that there should be a difference in the rate on a car equipped with a patent bunk and one not equipped, leaving out of question the amount of rate and special charge for patent bunker equipped car?

A. No, I do not. I can not see why the logger operator should be called upon to pay for a car suitably equipped to handle his business, any more than an ore producer who uses exclusively a hopper car or the coal dealer who uses a center dump car, which costs more money than your common gondola. I see no reason why you should protect one operator with suitable equipment and not another.

Q. As long as these cars are in use and service the man receiving an equipped car has a decided advantage, has he not?

A. He does.

Q. An advantage which is of some considerable expense to the railway company?

A. You mean to me?

[fol. 1288] Q. I say to the railroad company? The cost of equipping a car with bunks, and maintenance of the bunks is a cost to the railway company?

A. I do not get that.

Q. The cost of placing bunks on the car and cost of maintaining those bunks is a cost upon the railway company?

A. It is, and should be.

Supervisor Spinning: I should like to have an answer from the standpoint of benefit accruing to the railroad company?

A. I stated — first thing that the time saved in the use of these bunks would more than pay for the expense of equipping one car.

Supervisor Spinning: You mean it would more than compensate the company?

A. Absolutely the time saved and damage saved to the equipment for the investment.

Q. As a matter of fact it would pay for itself in one year, would it not?

A. Those bunks! We are using cars that are entirely equipped with this bunk equipment; there is not a car in that service of later date than 1916. Some of those cars which were used in our own logging operations before we turned them over to the Milwaukee were purchased as far back as 1913. It is obvious that with that equipment—it saves and protects equipment. It seems to me that it is a mighty good investment for carriers.

By the Director: These bunks carry a bigger load?

A. I so testified last night in my memorandum; stated that is one of the things I have developed, a difference between types of bunks. I think if carriers provide bunks it should be a uniform [fol. 1289] bunk and I am inclined to the thought that so far the turtle back bunk is the best type of bunk; it would certainly carry the largest load.

The Director: That would automatically compensate the carriers to some extent in increased earnings?

A. It will.

Supervisor Spinning: It has been testified by at least one other witness that loading would be increased by at least fifty per cent.

A. Yes, sir, I so testified myself.

Supervisor Cleland: Would the loggers consider favorably the establishment of a base rate on cars equipped with patent bunks with a penalty for failure to furnish that class of equipment?

A. I think they would.

By Mr. Dudley: What kind of penalty has your honor in mind?

Supervisor Cleland: A lesser rate.

By Mr. Welch: Unless the carriers are absolutely required to furnish a bunk, it is going to cause more or less confusion in this, that there are certain shippers in our district, and possibly elsewhere; certain operators have paid for their bunks at the rate of fifty cents per car. Mr. Frost bought his outright. That class of shipper has bought his bunk; he ought to be given some option to furnish his own bunk and I do not see how the man can keep his car in his own particular service. That is the trouble with the shippers furnishing the bunk.

Supervisor Spinning: Assuming that the installation of these patent bunks were of no benefit to the railroad company, would the loggers be willing to pay for patent bunks as facilitating the operation?

A. It enters into a great many things.

[fol. 1290] Supervisor Spinning: Do you think they would be willing?

A. I do not think so.

Supervisor Spinning: Do you think they could afford to?

A. I do not think so.

Mr. Da Ponte: Numbers of them have done it.

A. That is true.

Supervisor Spinning: I do not mean to pay for the bunk, but rather as a facility in the operation, just the same as wheels or any part of a car.

A. It is not a question of what you can do; it is a question of what is just, what is right to do; if you get the equipment as it has been testified to here—I think Mr. Frost said he was willing to pay that amount of money to assure himself of getting the cars. He was not buying bunks, but cars. There is a time when that comes to every logger and that is the bad feature of the contract arrangement.

Supervisor Spinning: My question only involved the responsibility on the part of the shipper; as something like six or seven per cent on the investment.

A. That would be objectionable.

Supervisor Spinning: The logger could do that and be benefitted by the installation of the bunk?

A. There is no question but what the bunk is a benefit to the logger; just to what extent, in dollars and cents I am not in a position to say.

Supervisor Spinning: You are not prepared to say whether the company could instal these bunks and charge the interest on the investment? You do not know whether the loggers could afford to do that?

A. I would say this that the average small logger could not; The larger one could.

[fol. 1291] Mr. Henderson: On behalf of my shippers there is no objection to the carriers putting on the bunks and considering it part of their equipment and capital account just exactly the same as wheels or airbrakes or any other part of the car.

By Mr. Calderhead: In regard to that additional charge made by the Milwaukee in their tariffs for cars equipped with patent bunks, do you consider that as a part of the rate?

A. That is a question, that I give an answer to will depend whether we will file reparation claim against the Wilwaukee Railway for advance on General Order 28.

By Mr. Calderhead: All the other carriers charge fifty cents per loaded car additional to the freight rate, which increased their charge under order 28?

A. They do not.

By Mr. Calderhead: So it is not in your judgment a freight charge but it is an additional charge you have for additional equipment?

A. That is it, exactly.

Q. It should not be increased or decreased with the increase or decrease of the rate?

A. Yes, sir.

By Mr. Horan: Regardless of what has happened in the past when carriers equipped their flats with bunks, you do not question their right to a return upon that additional investment?

A. No.

Q. That is the question Mr. Spinning is getting at.

A. Certainly, that should be provided for in the rate the same as any equipment?

By Mr. Balmer: They would also be entitled to compensate themselves in the rate for the maintenance and repair of the bunks?

A. Absolutely.

[fol. 1292] Supervisor Spinning: Then you would answer my question differently from what you did, in the light of your present understanding ?

A. Yes, sir.

By Mr. Dudley: You heard the testimony of witnesses yesterday, that loggers got a benefit of from one to two dollars per car for the use of patent bunks?

A. Yes, sir.

Q. In your experience would you agree with those figures?

A. I would. I think they were about fair.

Q. So that the logger receives a benefit of one to two dollars per car each trip—he would receive a far greater benefit from the use of the bunks than the carrier?

A. No. From reports read here of the damages to carriers, I think the bunks are a pretty good thing for them.

Q. They do not run as high as one to two dollars a car.

A. I do not know—you had some pretty high figures.

Q. In your opinion the patent bunk is an additional facility which is mutually beneficial to both shipper and carrier?

A. Oh, absolutely, a great deal, absolutely.

Q. And the cost of this additional facility would be assumed between the parties?

A. I stated that to Mr. Spinning a bit ago.

Supervisor Cleland: What do you mean?

A. They should include that either in their freight rate, not as a separate item, but it should be given consideration the same as any other item entering into freight rate basis.

Supervisor Cleland: If it should be determined that the base rate on an ordinary flat car should be one dollar, then the base rate upon a car equipped with a patent bunk should be greater?

A. In so far as the cost of the bunk concerns the capital account.

[fol. 1293] Q. And the maintenance?

A. Yes, sir.

Mr. Da Ponte: Mr. Albee testified that Northern Pacific cars, 75% of them were equipped with patent bunks, and 25% were not so equipped because they could be used in other services when not needed in the logging service; there ought to be a certain percentage available for use in other service.

Supervisor Spinning: You need some extra unfurnished cars?

Mr. Da Ponte: In time of big demand for logging cars this 25% would go into that service, when needed in that service.

Mr. Henderson: They could dismantle them to put them into other service. If a log car unequipped is not proper for use in logging service there should not be any rate on it. In other words if they had one rate for a good body, and another rate if they had no body——

Supervisor Cleland: We do not take it that way.

Mr. Henderson: My position is the statute requires them to furnish adequate transportation service and equipment, and if that is not adequate and efficent equipment it should not be furnished.

Supervisor Cleland: Suppose we should determine that adequate and sufficient equipment was a log car equipped with patent bunks, and they equipped 75% of their flat cars with patent bunks; there are uses for flat cars where patent bunks would interfere with the use of that car. In times of great demand for logging cars the carrier should not be required to keep an investment in patent bunks sufficient to equip every car they have, but should it not be handled by making a rate on a patent bunk car and allowing for the difference on a car furnished during those periods not so equipped?

[fol. 1294] Mr. Henderson: I do not believe that is the law, because I do not believe it is intended that a rate should be figured on any equipment that is not adequate and sufficient. If they are required to carry investment in bunks sufficient to equip flats for the logging service, they could dismantle for other service, and keep the bunks there; they still have the bunks. As far as basing the rate on facilities that are conceded to be inadequate, I do not believe the statute contemplates a rate on inadequate equipment that the carrier may have built for some other use because that happens to be the particular time or particular emergency in which they can inject the inefficient equipment. I believe the rate should be fixed on adequate and efficient equipment, and not put on something else for an emergency condition.

Supervisor Cleland: In practical railroading you can not form any fixed rule that can not be switched a little one way or the other, and if the patent bunks are adequate equipment and are standard equipment that are to be furnished, there should be some difference for the car not so equipped.

Mr. Henderson: When it is necessary by reason of some emergency, put that in, but to fix two rates would present a condition where they might not put in any adequate equipment, in order to refrain from the necessary investment in adequate equipment.

Supervisor Cleland: Can not that be taken care of in the spread between equipment of adequate character and inadequate character, because it would be his own loss to do it.

Mr. Henderson: It might be done, but in my experience I fail to recall such a case, but I believe it could be taken care of.

Supervisor Cleland: You agree there are emergencies?

Mr. Henderson: Yes, sir, for instance, when they lay out flats for grain, when they are moving the crops.

[fol. 1295] By Mr. Dudley: You testified last night that you had no difficulty in loading the minimum amount upon the cars except in the case of certain short cars?

A. Yes, sir.

Q. Those cars were the cars purchased by the Milwaukee at the time they took over the Pacific Eastern?

A. Yes, sir.

Q. So that the only cars which you have any difficulty in loading the minimum upon are those cars which you sold us?

A. That is what I stated.

Q. Referring to the bunks on those cars, the Milwaukee paid for those bunks when it bought the cars?

A. Yes, sir, they did; depreciated book value of the entire equipment.

By Mr. Balmer:

Q. I understand some of your exhibits were intended to show that on this particular seventeen mile haul the cost of operation was lower than in general in the State in comparison with Irving.

A. Speaking of the individual log haul I said I thought so.

Q. Was it intended to be drawn as an inference from your testimony that the log rates in the States should be adjusted with reference to conditions in particular localities?

A. I do not see how it can. We ourselves feel that there should be one rate for all and it should be a uniform rate; we do feel though that the line of demarcation is the Cascade range; that the man logging in the so-called tooth-pick timber over there has no operation analogous with us at all and that the two districts should not be considered together.

Q. You mean East and West of the Cascades?

A. Yes, sir, and as to the districts west of the Cascades I do not [fol. 1296] see how you can take any particular operation and feature it with a special rate. I think there should be one rate for all.

Q. What are the reasons leading you to differentiate between rates east and west of the Cascades?

A. Sparsity of the timber, the type of timber, and the smallness of the operation.

Q. These reasons take into consideration the matter solely from the view point of the logger! I suppose you would follow that reasoning far enough to take into consideration other aspects of the question from the standpoint of the railway company?

A. Yes, I would think that the railway company would view that from the same angle.

Q. For instance, by reason of trees and density—costs of operation, if they were a great deal higher in one section than another, you feel that should be reflected in rates, notwithstanding the two operations are in the same State?

A. I think the line of damarcation would be the Cascade range. Any operation on the spread should be uniform west of the Cascades, in any operation in any district.

Q. And East of the Cascades you determine the question by conditions perculiar to that region?

A. Absolutely.

The Director: Where should rates be higher, East or West of the mountains?

A. I would not attempt to say that. From exhibits shown it seems to me that the length of haul, the class of timber and risks involved, &c., lack of density of it, and the markets, East of the mountains carry a relatively higher rate, but I do not want to go on record as to that without making a study of it.

[fol. 1297] By Mr. Da Ponte:

Q. Considering log costs of $20 a thousand in the timber, do you want to tell the Commission that the disadvantage should be further aggravated by giving them a higher rate than on the West side?

A. My dear Mr. Da Ponte, this is the first time I have heard the carriers admit that the other fellows had anything to do with it.

Q. Speaking from the stanpoint of the shipper, the contention of the loggers is that the loggers would not take a higher rate; I want to know whether you are going to apply that theory to the fellow on the East side.

The Director: I would like to hear that question answered.

Mr. Welch: We do not want to enter into a discussion between ourselves and the Eastern Washington shippers. I think the facts have been submitted and are open to the Commission to pass upon it. I do not believe Mr. Richmond will want to enter into that discussion.

Mr. Henderson: I make further objection that the testimony is without dispute that there is no condition on the East side where they are in commercial logging business. The testimony here is they manufacture their logs over there and do not market them as they do on the West side.

The Director: Mr. Richmond may answer the question if he wishes.

Mr. Horan: Do you know anything about logging conditions East of the mountains?

A. I would not want to state without making a study East of the mountains.

Q. You said there should be this difference between the East and [fol. 1298] West side and you went on to say you thought you ought to have a lower rate on this side. I am asking you this; you heard the testimony as to logging costs and quality of timber, &c., and assuming that these gentlemen correctly stated the conditions on the East side, do you want to be understood as saying that in view of their logging costs and quality of their timber, paucity, &c., and disadvantage as compared with the West side—it should be further aggravated by differential in rate against them?

Objected to as not proper cross examination.

Objection overruled.

A. I would answer that in this manner. I suppose the same position would obtain in our logging operations in connection with our small logs. It has been testified they are almost valueless, but we must pay the same amount of freight. Speaking of the two districts, I am not in position to say anything more than I have. Just what had occurred to me from what I had heard in the testimony, I would not attempt to make any definite answer without first making a study of their conditions.

Mr. Da Ponte: I am asking you to base your answer on the assumption that these men gave.

The Director: I think he has declined to make answer based on the testimony without making a study.

Mr. Da Ponte: He has evaded the question; he has not answered it.

Supervisor Spinning: This question was inaugurated by the Great Northern people; they asked if there should be a distinction in rate when there is a great difference in cost of transportation.

[fol. 1299] Mr. Da Ponte: As I understand it, the witness testified there should be a different rate East and West.

Mr. Henderson: He said the spread should be different; he said the conditions should be different and the line of demarcation should be the range, but he did not say why the rate should be higher.

The Director: Are there any other questions?

By Mr. Pederson: You testified to some thirty years' experience in traffic and operating departments?

A. Yes, sir, and accounting.

Q. As to traffic loaded on open cars, is it customary to require the shipper or the carrier to properly secure the load?

A. On general traffic it is entirely up to the shipper.

By Mr. Da Ponte: That applies to logs, does it not?

A. I said general traffic.

Q. That applies to logs. You secure the load and stake it, don't you?

A. Yes, we secure the load.

The Director: That is based upon the assumption that the equipment furnished by the carrier is adequate for the purpose for which it is used?

A. It is quite customary.

Mr. Da Ponte: These stakes and bunks are for that purpose?

Mr. Henderson: Bunks are not.

Mr. Calderhead: I do not want to open a question that is apparently closed, but I would like your opinion as to whether or not the carriers by reason of the cheaper operation that has been testified to in handling cars equipped with bunks, would be justified in increasing the rate by the additional cost of cars and that class of equipment,—it would cheapen the operation of the carrier?

[fol. 1300] A. I stated a bit ago in connection with that, that inasmuch as it had a combined value, and having this in mind, that the original rate was predicated on the then type of equipment, it would be no more than fair for the carrier to consider the added money for more and better equipment should be reflected in the rate.

Mr. Calderhead: But if by reason of adequate equipment they lessen their operating expense, would you then increase their rates?

The Director: That would depend on whether the reduction was greater than the increase?

The Witness: Yes, sir.

Mr. Welch: To capitalize the investment in the case?

A. Yes, sir.

Mr. Balmer: You would not entirely ignore if you were a traffic man and making a rate, the effect of the increased value of the service to the shipper?

A. No, I do not think I would.

Q. Do you know of any railroad in the United States that furnishes tank cars for bulk oil loading?

Objected to as immaterial.

A. No, I do not think so. I can not recall at this time. The Northwest carriers have tank cars, but for their own fuel oil. There are a very large number of special equipment, such as gun carriages, as I spoke of, and common hopper cars, and the specially constructed gondola, that there is no extra charge for.

Q. You take the oil industry and consider the development and especially the bulk in recent years, and in considering in connection with that the practices of the carriers, your own experience as a railroad man has been that the tank cars themselves for handling of oil in bulk are all furnished by the oil shippers?

[fol. 1301] A. Yes, sir, but the carrier pays rental for the use of them.

Mr. Henderson: I believe you said you did not know a company where the carrier furnishes the tank?

A. Yes, sir.

Q. But you do know a number of places where the carrier furnishes the bunk cars don't you?

A. Yes, sir, the O. W. does entirely.

Supervisor Cleland: Is there any difference in the freight charge on a car containing automobiles where the car is of ordinary equipment or one equipped with end doors?

A. No, sir, there is no difference in the charge.

Mr. Dudley: There is a difference in rate; for example, there is a higher rate for the use of refrigerator cars.

A. That depends on whose refrigerator you are using. The Milwaukee has their own refrigerator car, and any railroad operating its own refrigerator car makes no extra charge for it.

Q. If a man desires refrigerator service in there a special rate for that?

A. For use of ice and refrigeration, but not for the car.

Q. The car is used only when they use the ice?

A. The car is used only then.

Mr. Welch: It is a fact the Milwaukee does have refrigerator cars for service?

A. Yes, sir, and charges for icing and all that.

Mr. Da Ponte: Mr. Calderhead: In inquiring of Mr. Richmond as to whether he would consider that the carrier should receive additional compensation when they were decreasing their expense—may I ask what item you had in mind in decreasing expense—did you mean repairs to cars?

[fol. 1302] Mr. Calderhead: No, in the items of delay to equipment.

Mr. Da Ponte: What I had in mind was that the shipper being required to load and unload, taking care of a break for instance, one shipper unloads by hand and some of the larger ones have those gravity bars which unload them very quickly, so you can go to great lengths in figuring out things of that kind.

Mr. Calderhead: But two carriers testified it was more economical from their standpoint; that there was a certain benefit to the carriers in their operating cost due to the use of the patent bunks.

Mr. Da Ponte: I think you are mistaken. I think no witness so testified.

Mr. Calderhead: I do not recall distinctly the testimony on that point.

Mr. Da Ponte: I think the testimony as to that, if any, is so entirely indistinct and vague as not to be valuable.

Mr. Dudley: You stated that you were about thirty years in railroad service?

A. Yes, sir.

Q. You have been engaged while in railroad service,—you have been more or less in contact with shipments of logs?

A. In the last seventeen and a half years, yes, sir.

Q. In your experience with the railroad companies and logging companies do you recall any case of brakemen chopping stakes?

A. No, sir.

Supervisor Spinning: What percentage of the Milwaukee cars are bunked?

Mr. Dudley: I do not know.

Supervisor Spinning: Do you think there is two-thirds of them?

Mr. Dudley: That would be a pretty close guess.

[fol. 1303] Supervisor Spinning: Of the Great Northern?

Mr. Balmer: A very small proportion. The only cars of the Great Northern equipped with bunks, as I recall, are those which Mr. Frost himself equipped. Very few in number, not over two hundred altogether.

Mr. Da Ponte: The Northern Pacific has 35 (?) of their own cars.

J. G. Dickson, being first duly sworn, testified as follows:

Examined by Mr. Horan:

Q. What is your occupation?

A. I am manager of the Cascade Timber Company and Pacific States Lumber Company and in connection with the interest which the Cascade Timber company has in the Mineral Lake Logging Company, I also have charge of that company's operations.

Q. Where do those concerns operate that you have mentioned?

A. The Pacific States Lumber company operate their own logging camps in the vicinity of Cedar Falls, which is on the Chicago, Milwaukee & St. Paul main line, I think 58 miles from Tacoma, and also does some operating in the vicinity of their sawmill at Selleck, which is located on the Enumclaw branch of the Milwaukee line and the Greenriver Branch of the Northern Pacific. The Cascade Timber Company's operations at present are on the Tacoma Eastern, or rather the National Park line of the Chicago, Milwaukee & St. Paul, located I believe about 43 miles from Tacoma. The Mineral Lake Logging Company operations are located near Ashford on the National Park Line of the Chicago, Milwaukee & St. Paul, their logging [fol. 1304] railroad joining the National Park line about a mile west of Ashford, or about 53 or 54 miles from Tacoma.

Q. The Pacific States Lumber Company logs are partly off its own line and partly off the Milwaukee?

A. Yes, sir.

Q. The other companies log off the Milwaukee?

A. Yes, sir, selling their logs to mills along the National Park Line or if brought out on the Tacoma Eastern to the mills on tidewater.

Q. How long have you been connected with these various companies?

A. Since their inception.

Q. Some twelve to fourteen years or more?

A. They were not all organized at the same time, but those companies, or the companies that they succeeded have been in existence for the last twenty years and I have been actively connected with their operations during all of that time.

Q. Have you had any experience with the use of patent bunks, concerning which there has been so much testimony?

A. Yes, sir, I have.

Q. There has been some discussion as to whether the use of patent bunks on flats in connection with logging operations, are of any benefit to the carrier. Can you make any observation on that point of value?

A. Well, there is very little question about that. In the first place there is less damage to the car itself by reason of the fact that the steel bunks raise the logs up from the deck of the car, more than the plain type of flat, which has a small wooden bunk. The knots and the irregularities of the log itself does not tear up [fol. 1305] the deck of the car or is not as likely to tear up the deck of the car as it would with the plain flats.

Not only that, but in some places in connection with our operations the switching engine assists in dumping the logs to the extent of waiting for the stakes to be cut on the plain flats, and waiting, shifting cars at the dump, and that means time to the switching crew and engine, which time is of value to the railroad company.

Q. You mean to say they are quicker in unloading?

A. Yes, sir.

Q. Materially quicker?

A. Why, yes, sir; average quicker, because it takes time for a man to go along and chop eight stakes on a car, which is the number of stakes on one side of a car, and the switching crew has got to switch up a train of logs until it gets to a point near the dump, and then stops and waits for the logs to be cut. They can not cut those stakes any distance from the dump because it would be unsafe to transport the logs any distance without the stakes being there. As a matter of fact even in the short distance it sometimes happens that after the stakes are cut and the engine starts up the logs fall off before they reach the incline or the place where the logs should be dumped into the water, and sometimes they dump them on the ground or half way on the ground and half in the water, and I have known cases and seen cases where logs would fall off in that manner and obstruct the track itself and make serious delays to the train

crews; whereas with the use of the patent bunks the cars are shifted on to the dump and are tripped after they get there.

[fol. 1306] Q. Is there any question of additional safety to the carriers' property by reason of the use of the bunks?

A. What I have just stated.

Q. That is one element; that covers one feature of it.

A. The other is that with the wooden stakes it occasionally happens that the stake cutter in the woods gets hold of a piece of wood that is not strong enough and the stakes break; whereas in the steel bunk there they are solid and I have not in my experience with the use of them known anything of that sort to occur.

Q. That is on the transportation end, the stakes sometimes break?

A. Yes, sir.

Q. Have you made any investigation as to whether the loads are bigger under like conditions when you had patent bunks than when you use stakes?

A. Yes, sir, I have.

Q. What investigation have you made of the results, or what results have you to show for that investigation?

A. Well, I have the average load of our log shipments for our various camps for the years 1919 and 1920 and have that averaged separately. I have the average number of feet loaded on plain flat cars, that is not bunked cars and can give you exact figures on that. There is quite a variation in the difference, but without exception it shows that the larger number of feet of logs are loaded on the patent bunks, larger than on the plain flats, and in consequence the earning capacity of the railroad company will run from thirty to forty cents per car up to $1.50 per car according to the length of haul or rate under which the cars are transported. Our operations during 1919 and 1920 were not in the exact locations that I gave you as we are there operating at the present time, because we have [fol. 1307] operated at different points along the Tacoma Eastern, and as the timber would end there at one point, we would move to another; so this explains the designations I have here. From our Cascade Timber Company for the year 1919——

Q. Have you reduced that to averages?

A. From the Cascade Timber Company in the year 1919 at Easton and American Lake Camp we shipped 1,199 loads on plain flats and 2,154 on bunked cars. The average loading of the 2,154 bunked cars over the 1,199 plain flats was 243 feet. From our Tanweeks(?) camp during the year 1919 we shipped 1,106 loads on plain flats and 1,875 on bunks, the average loading of the bunk cars over the plain flats being 174 feet. I wish to explain that when I speak of bunked cars I speak of cars with the steel bunks, and when I refer to plain flats I mean cars simply with a cross piece of wood which is all with the car and I think designate it as a bunked car.

Mr. Dudley: There are no logs on a car without either wood or patent bunks?

A. No.

Mr. Da Ponte: You had statistics on those wood bunk cars?

A. On what I call plain flats, or wood bunked cars we use wood stakes, split out of the timber by the logger.

From our East Creek camp—these three camps were on the Tacoma Eastern, and all in 1919, we loaded 1,069 common flats and 1,389 bunk cars; the average loading of the bunk cars from that camp was 252 feet per car over that of the common flats. For that same year from our Mineral Lake Logging Company operations we loaded 1,339 common flats and 1,802 bunked cars; the average loading of the bunked cars from that camp during the year 1919 was 420 feet heavier than the common flats. From our Pacific States [fol. 1308] operations, that portion of that transported over common carrier road which in this case was the Chicago, Milwaukee & St. Paul, we loaded 1,521 common flats and 3,202 bunked cars; the average loading of the bunked cars over and above that of common flats was 763 feet per car.

I can also give figures for this year, 1920, although they are approximately the same, and would take up that much more time to cover.

Q. What can you say as to whether a flat car equipped with patent bunks can be used for any other purpose than for logs?

A. It was testified at this hearing in connection with cost of repairs to logging cars that the use of logging cars for other purposes was very small. I knew that there was so many other uses made for logging cars that I forgot for a moment I was not an attorney and interjected myself into the case at that time. Afterwards, though, somewhat like Mr. Irving, I got back where I belonged, out of the realm of the law. But it is a matter of fact that a very extensive use is made of flat cars for other purposes. I know that in connection with our logging.

Q. You mean flat cars equipped with bunks?

A. Yes, sir; both cars equipped with bunks, and cars equipped with wooden bunks. We have two sawmills, one at Mineral and the other at Selleck. We ship a good deal of timber locally, principally to Tacoma and Seattle, and they almost without exception, the class of equipment furnished for that service is the same class of equipment that we are using in our log service, and there are very few loads of timber, in fact I have not thought of any during our company's operations, since I have been sitting listening to this [fol. 1309] discussion this morning on which we could not use patented bunk car, and it is a fact we do make use of patent bunked car quite extensively for loading lumber to Tacoma and Selleck.

Q. Would poles also load on those cars?

A. It is quite true of poles, the same, and to some lesser degree the way of loading poles on those cars, on bunked cars, is the same, the same as logs, although to a very much lesser degree.

Q. If it should be desired to remove the bunks would it be very expensive operation?

A. No, it would not. I would not pretend to say, for I am not qualified so say what that expense would be.

Q. In your operations have you had any trouble in meeting the minimum requirements of the railroads?

A. We have had a good deal of trouble in meeting the minimum.

Q. In what part of your operation?

A. I was going on to explain. I was going to say we had early trouble meeting the minimum in this way, that whereas we could get a good many cars in excess of the minimum, some of them well in excess of the minimum, we also get an almost equal number of cars, or a good many cars, below the minimum, and we have to pay the full amount that we loaded on cars in excess of the minimum, but on the cars that we fail to load up to the minimum we have to pay the minimum charge, and in consequence of that the amount per thousand feet that we pay for the transportation of logs is somewhat in excess of the rate and to that extent the rate as applied to our cost of transporting logs is somewhat misleading. [fol. 1310] I may state that on the Tacoma Eastern we operate under a minimum of 6,000 feet; that in our Pacific States Lumber Company operations we are on that part of the main line of the Chicago, Milwaukee & St. Paul Railway Company, and Enumclaw we operate under a 7,000 foot minimum.

I have the average figures for the years 1919 and 1920 of all the cars loaded, and I can also give you the exact detail if required of a few instances, so as not to cumber the record too much, of just the conditions, the difference in excess of the rate per thousand feet that we actually pay.

The Director: We will take a recess of five minutes.

[fol. 1311] (Resuming after the 5 minute recess at 11.30 a. m. Oct. 29.)

By Mr. Da Ponte: It is my understanding that we proceed this afternoon and finish up, and then adjourn until Tuesday next, by which time we will have prepared a tariff to be filed pursuant to the understanding we had in the record; and the traffic men will be here for examination on that proposed tariff, which will be in such shape that it will take effect unless suspended by the Commission, pursuant to the understanding we had, and that the record here will be part of the supension proceeding.

By Mr. Henderson: I did not understand there would be any tariff filed which would take action by this Department, but that it would be filed in advisory manner. We are willing to go ahead and complete the testimony as soon as we can, and they can file all the tariffs they want to, without the Commission convening again.

By Mr. Da Ponte: We will not file this unless it is to be filed as a tariff, and the evidence in this record to be used as part of the suspension proceeding. Our understanding was we would file this schedule of rates which we would be willing to accept without prejudice to our witnesses as to what the rate should be as a matter of law, which tariff would take effect unless suspended by the Commission. Of course, it was understood, the Commission was to suspend it, and the record in this case was to be part of the suspension proceedings.

The shippers will have the right to cross examine traffic men on this tariff, and we will offer them at that time, to comply with the expressed wish of the shippers, and these are the only conditions under which we will file the proposed sc-edules.

By Supervisor Cleland: When you say the proceedings in this case to be part of the suspension proceedings, does that contemplate some further hearing?

By Mr. Da Ponte: You would have to have some hearing under suspension proceedings, and the stipulation here is to avoid the neces-
[fol. 1312] sity of going over all this again in suspension case.

By Supervisor Cleland: Do you mean part of it or all of it?

By Mr. Da Ponte: As a practical matter, it would be all of it.

By Mr. Spinning: A hearing would be unavoidable.

By Mr. Da Ponte: There has to be some kind of proceeding on a suspension order, but we want to avoid going all over this by taking this record as the record in the suspension hearing.

By Supervisor Cleland: It will be taken as a record of the reasonableness of the proposed rate.

By Mr. Balmer: The loggers were importuning us to propose this tariff, and I made the suggestion the other day we would do that, but if we filed a tariff of course we would want all of the testimony taken at this hearing to be related to that tariff, and that is the reason the suggestion was just made which Mr. Da Ponte has referred to.

By the Director: What is the necessity of meeting again?

By Mr. Da Ponte: To let them cross examine the traffic men.

By Mr. Henderson: As far the loggers were concerned, we did not request the carriers to file any proposed tariff; the request came from the Department. If they do not care to comply with that request we have nothing to do with it, or if they do the manner of complying with the request is between the Department and the carriers. But, so far as the loggers are concerned, they can file all the tariffs they want to; we will take our testimony and the rebuttal testimony of the carriers, and consider that as anything the Department and the carriers want to consider it.

By Mr. Horan to the witness:

Q. Have you had any difficulty in complying with the tariffs in the minimum, in regard to your logging operations? Have you made any figures illustrating the cost of minimum requirements in your op-rations?

Ans. Yes, sir, I have.

By Supervisor Cleland: Mr. Da Ponte, I notice you were the only carrier representative who made the stipulation. Were you speaking
[fol. 1313] for all the other carrier representatives, agreeing that that stipulation is binding upon them?

By Mr. Dudley: As far as the Milwaukee is concerned, we accept it, subject to the single reservation we made, that the tariff is filed as a compromise proposition, and without prejudice.

By Supervisor Cleland: We understand that.

By Mr. Balmer: That is the understanding of the Great Northern.

By the Director: It is also understood that the testimony taken in this hearing will be considered in determining the reasonableness of the tariff to be filed by carriers, and there is no further hearing necessary, unless called for by the Department itself.

By Mr. Robbins: The Oregon-Washington R. R. & N. Co. agrees to that with the distinct understanding that this tariff is filed without prejudice to future proceedings.

By Mr. Henderson: And without any prejudice on the part of any one. We do not want to be prejudiced by the filing of a tariff; we are not asking any rates, and if that tariff is filed it is without prejudice to loggers, the same as applied to the carriers; filed without prejudice to the Department and without prejudice to the parties in this case.

By Mr. Balmer: I think all the carriers have distinctly expressed themselves to the effect that this tariff will be filed by them under the conditions stated, and that they agree that all the evidence taken at this hearing will be considered as applicable to the suspension proceeding and the Commission's Suspensio*j* order which will of course follow the filing of the tariff. Now, under the law, as I recall it, it will be necessary, notwithstanding that stipulation, for the Commission to designate a date for hearing. The carriers have stipulated that they do not care, at that hearing, to introduce any further evidence justifying the tariff. Mr. Henderson is evidently entertaining some reservation as to what the loggers and other parties rep-
[fol. 1314] resented here at the present time will do in that suspension proceeding which will ensue upon the filing of the tariff. We have made a statement we are willing to be bound by the evidence introduced here and we would like to have a definite statement, yes or no, from the loggers present and represented at this proceeding, whether they will make the same stipulation.

By Mr. Henderson: The difference in our positions is they know what the tariff will be, and do not.

By Supervisor Cleland: What difference does it make? This tariff is merely advisory to the Department, and no order we make in this case is going to be the final order on the log rate, and what Mr. Balmer is really attempting to avoid is another hearing on this log rate.

By Mr. Henderson: That is what I want; but if they want to file that as an official tariff, and the Commission will have to suspend it for a certain period until hearing, and they can suspend it for an additional time, and it finally goes into effect unless there is a hearing.

By Supervisor Cleland: They have stipulated that this testimony will be considered the testimony on that hearing.

By Mr. Henderson: If it is understood this tariff is an advisory tariff for the benefit of the Commission, that is all right, we say, but they are insisting on filing it as a legal tariff and with all the law applicable to ragularly filed tariffs filed with this Commission. They could submit it as part of the evidence in this record; and that is what they should do. If they will file it as a part of the record in

this case, as advisory, we will not cross examine, but when we get down to the proposition of filing it as a tariff and it has all of the verity that goes with a filed tariff, that may be another proposition.

By Mr. Da Ponte: In no other way could we obviate this further hearing.

By Mr. Horan: You could do so by filing an illustrative and advistory tariff, just like we have.

[fol. 1315] By Mr. Balmer: It has got to be filed some time or another.

By Supervisor Spinning: It is a question of how you can arrange legally that the evidence in this case will apply to the consideration of the merits of that tariff when filed.

By Mr. Balmer: The carriers have stipulated that it will.

By Mr. Henderson: I am just a little bit curious to know why the tariff that they are proposing cannot be filed as evidence in this case without being filed as a tariff. If it comes in as part of the evidence in this case it takes no verity as a regularly filed document and I am a little curious to know why that must be filed as a tariff and not as part of the evidence in this case, and it would not in any wise bind the Department or bind anybody with reference to this proposed tariff. I say, let it come in; if the Department is satisfied, I am satisfied.

But I cannot understand the insistence of carriers that it is not to be filed in this case, but that they will file it as a proposed legal tariff and then turn around and apply this case to it. Why do they not let this case go through and put that in as evidence herein?

By Mr. Balmer: Did I understand you to say if the Department is satisfied with the filing of an official regular tariff, you yourself would also be satisfied?

By Mr. Henderson: I cannot do anything else but be satisfied, but I do not want to be bound in the legal phases by the filing of that tariff in this case.

By Mr. Da Ponte: It is subject to full exercise of the Commission's jurisdiction to suspend it or alter it or hold it reasonable or unreasonable and in this way we get the benefit of this proceeding as applicable to that tariff instead of going over the whole thing in another proceeding.

By the Director: I think perhaps the reason he wishes to have it filed in a legal way was stated yesterday that they might voluntarily [fol. 1316] assume the loss on the traffic, and the department could not legally compel a loss, so in order to make the tariff legal and binding they may voluntarily file one, while the Commission could not compel them to do so. If they have that in mind it might be well to permit them to do so.

By Mr. Da Ponte: I think that it will be a lower tariff, and that the Commission will get the benefit of this evidence.

By Mr. Henderson: I can not conceive any reason why that should not be filed as part of the evidence in this case and not filed in the Tariff Department as a Proposed Tariff to be acted on; but if the Department is willing to take it that way I have not anything

to say but I do not want to stipulate any rights I have in reference to this tariff in any other proceeding.

By Supervisor Cleland: I can see a reason for filing it that way. Having offered evidence here which they contend is justifying a higher compensatory rate, and they have stated and it has been agreed that any rate they may file will not be prejudicial to their legal rights at the same time, it would be conflicting to say the last to file a lesser rate than the one for which they have been contending, and I am willing to accept the filing which they have offered.

The Director: I can see no objection to it, without prejudicing the rights of any one.

By Mr. Henderson: I am perfectly willing, since loggers rights are not prejudiced, I have no complaint of what they do.

By Mr. Da Ponte: If after you see the tariff you want to cross examine any of the traffic men we will be glad to come, and the evidence given at that time may be read by any one, and let the record go right straight through.

By Mr. Horan (addressing the witness on the stand): Will you take up the logging tariffs of the Tacoma Eastern.

A. I think I have already stated the minimum requirements on [fol. 1317] the Tacoma Eastern were 6,000 feet.

Q. Have you any figures to show what the cost in dollars and cents has been for a given movement of the minimum requirements for any particular period?

By Supervisor Cleland: Let me interrupt a moment. With reference to the tariff to be filed, I understand Mr. Henderson may request the privilege of cross examination of traffic men. Should not there be some understanding as to how that is to be done, or when it is to be done, or shall we let it stand this way, that we will make an order in this case within thirty days if we have received no written notice from you to the contrary?

By Mr. Henderson: If that tariff is proposed and suspended and a hearing called on it, that is a separate docket from this docket and there will have to be some consolidation. In so far as any clients I now represent or I am now presenting or may represent are concerned, when that tariff is regularly filed and the Commission suspends it, then if we fail to protest to that tariff, which we may have to do in order to protect any rights in the matter, somebody has got to suspend that tariff and take evidence again unless it is stipulated it may be suspended.

By Mr. Da Ponte: Of course.

By Mr. Henderson: There must be some way in which these two things are consolidated, because you get an entirely different case; you will give it a docket number and a different record; these records have to be consolidated and unless somebody takes some action on that tariff there will never be a hearing, unless it is stipulated it is part of the evidence.

By the Director: It is already stipulated.

By Mr. Henderson: I can not stipulate what I may want to do with it.

By Supervisor Cleland: Let us have this understanding; they will file a tariff in the next few days, and you will notify us within [fol. 1318] thirty days whether or not you desire to cross examine their witnesses.

Mr. Henderson: I will do that.

Supervisor Cleland: I mean by that, if we do not receive written communication from you within a thirty day period we will then enter an order in this case.

By Mr. Dudley: Are you willing to stipulate that if you file a protest on the tariff, that hearing upon the tariff at that time shall be upon the evidence introduced at this hearing, and no further evidence to be introduced by either party upon the suspension, but simply stipulate the suspension will be determined upon the evidence in this proceeding?

By Mr. Henderson: So far as anybody I represent is concerned, I am not going to make any stipulation with reference to that tariff, but I will stipulate that if the Department suspends that tariff, this record, in behalf of my clients, may be considered all of the record in the suspension case.

But I am not going to stipulate anything on that tariff.

By Mr. Da Ponte: While it is definite, let's leave it.

The witness, continuing, said: Rererring to our operations on the Tacoma Eastern—we are operating there under a 6,000 foot minimum. During the year 1919 the Mineral Lake Logging Company shipped 3,141 cars of logs to various points, on the Tacoma Eastern.

Q. How many million feet was that?

A. 18,563,000 feet. The excess amount which we paid on account of inability to load to the 6,000 foot minimum under which we were operating that year, on this amount of logs, was $2,826.21. Had the minimum been 7,000 feet as has been suggested in some quarters the excess, or the penalty, which we would have been obliged to pay would have been $6,020.86. For the year 1920 I [fol. 1319] have this segregated for the period January 1 to August 26, and from August 27 to November 20, the date our operations closed that year. In the first period mentioned, January first to August 26th, we shipped 3,459 cars, and the excess amount which we ought to pay in addition to the freight rate on the 6,000 feet was $3,972.87. Had the 7,000 foot minimum been in effect, we would have been obliged to pay $7,769.87.

Q. What was the number of feet?

A. 21,270,974 feet. From August 27 we shipped one thousand cars, exactly, with a total footage of 6,546,210; the penalty which we did pay on this was $455.93, and the penalty which we would have been compelled to pay under a 7,000 foot minimum was $1,177.19. I can perhaps illustrate what that condition means by the difference in the rate. For example during the year 1919 the rate from this camp to Tacoma was two dollars per thousand feet. Had the 7,000 foot minimum been in effect the actual rate under the two dollar tariff on the actual amount which we would have been obliged to pay would have been $2.47½.

Q. In other words it would have cost you $2.47 because of failure to meet the minimum requirement of 7,000 feet.

A. That was during 1919. Since August 26th, the rate which we would have had to pay per thousand feet in excess of the $2.00 would have been sixty-one and a half cents.

Q. Have you revised figures for 1920?

A. This is the period January 1 to August 26, 1920. I can also give you a later period if you like, and I can go on indefinitely on the other shipments if you desire.

[fol. 1320] Supervisor Spinning: You have exhibits covering this?

A. No.

Q. Is any effort made to comply with the minimum?

A. Every effort that can be made, to comply with the minimum. During a large portion of this period our main trouble has been shortage of cars, and we are putting on to the cars everything we can.

Q. You mean during all that period you operated here?

A. Yes, sir.

The Director: You were advised though, from time to time, that you were falling below the minimum?

A. Yes, sir.

Supervisor Cleland: How do you explain your inability to load 6,000 feet minimum, when testimony last night was to the effect it was possible to load seven thousand feet minimum.

A. That condition varies in different types of timber. We can illustrate that from our own operations in the Pacific States, where we operate under a 7,000 minimum. On our Pacific States operations during the year 1919 we shipped 4,723 cars; I have not the total footage. We averaged 8,202 feet per car on common flats at that point and 8,965 on patent bunks. During the year 1920 in that same locality we averaged 7,134 feet per car on common flats and 7,607 on the patent bunks; that is absolutely correct; our 1919 operations were largely down along the main line of the Milwaukee, whereas in our 1920 operations we had begun to go back into the hills, into the Cedar Lake district, where the timber began to get smaller; in other words early in 1919, we got upwards of 8,000 [fol. 1321] feet ,and the average was considerably larger than what we got later in 1919.

The timber in which we have been operating on the Tacoma Eastern was likewise a poorer class of timber, not only in the size, although not so much in size as the fact that it is not the tall, straight lumber, smooth type of timber which we have in the other districts. Not only that, but we get a very much larger per cent of cedar; in fact a greater average percentage of cedar. The percentage of cedar in the Pacific States locality in this year was very small, but on the Tacoma Eastern district we had a very heavy percentage of cedar, and on account of the difference in character of the growth we can not safely load to the heighth we can on smooth, even-bodied timber.

Q. That is to say, in cedar, you cannot get the load in thousand feet that you can in fir?

A. No one can. We get it in height but no other way. We cannot build it up in the same way we can with smooth type timber.

Q. You consider the minimum really ought to be smaller?

A. I do not say that because you cannot load it completely, as a practical proposition.

Supervisor Cleland: Would it be practicable or feasible for the Department to establish a uniform minimum?

A. In answer to that—I feel that a certain type of timber or growth of timber, is not confined to any one locality. It is true that the Tacoma Eastern timber which we have been operating in does not compare on the average with the other localities in the state. On the other hand it is poor in some other localities and I can see the difficulty of providing a minimum in one spot or in one type of timber and not in another.

[fol. 1322] Supervisor Cleland: You could not make a flat minimum that would be just to either the carriers or the shippers—that is to say, a minimum of say seven thousand feet for the entire State?

A. Well, I can see where that is going to work a hardship on us, in some parts of our operations particularly; in some parts of our operations, and also work a hardship on others, but I am not prepared to or advocate a different type, or a different amount of minimum in the different localities West of the Cascades, because on one line of railroad, or one branch of a railroad, you may and do often run into different types of timber, and I can see the difficulty of doing that. I have hoped to help out that situation and work out some rule, and especially that you might see the advisability of putting into effect a minimum basis on average shipment, although our average during that period is somewhat less than the 7,000—very much smaller in some cases; the big penalty does not come in that so much as it does come in the fact that so many cars will fall short of the minimum by several thousand feet, on which we have to pay. For instance we have a car with 3,000 feet, on which we have to pay for $7,000 feet, whereas on the next car there will be 9,000 feet and we have to pay for the 9,000. If we had a tariff which would give us an average minimum, we could combine these cars, so it would be a good deal less of a hardship. We would be getting somewhat nearer to justice on an average of 7,000, out of the average on individual cars, than we now have under a 6,000 minimum.

Supervisor Cleland: How would you arrange such minimum? Would it be on the average train load or average shipments?

A. Average train load, on average shipments it occurred to me [fol. 1323] was probably the best.

Supervisor Cleland: In the same locality?

A. Yes, sir, on average shipments for the month.

Supervisor Cleland: Making the adjustment at the end of the period?

A. Yes, sir. The logging minimum is entirely different proposition from the minimum as applied to any other commodity in this respect, and that is, that the minimum on other commodities,

it is possible to live up to. A minimum as applied to logs it is not possible; the railroads, loggers and the public are being fooled or fooling themselves as to what is the actual rate as to cost of transporting logs under present arrangement.

By Mr. Dudley: Is the minimum affected by the size of the car materially?

A. It has not been affected in our case because your cars which we use for loading are either 41 foot, of 71,000 capacity cars, or 42 foot, 80,000 capacity cars. While it is true that we can perhaps get a little better load on the 42 foot car than on a 41 foot, in many ways, I do not know just what that difference would amount to and I have no means of determining it readily although I have said it does make a difference on your bunked cars. You speak of hopper cars for coal, and other special type of cars. Your line have been doing a little experimenting in the log service the last year or two, and you switched from the Seattle car and gave us several skeleton types of trucks. As far as air and brakes and all that sort of thing is concerned, it is all just as safe for service as the ordinary flat car, but they are especially equipped for the handling of logs and I may say that I have personally kept track of them. Several [fol. 1324] of these cars have been placed in our service, as I suppose with others, and I find the average load on that special type of equipment averages very much better, higher, than on the other kinds.

Q. Or even over bunked flats?

A. Yes, sir.

Q. In equipping cars with bunks, there are more 42 foot cars than 41 foot cars, are there not?

A. I am not in a position to say.

Q. If there are, that may account for the difference between loads on bunked cars and unequipped, because some are 42 and the unequipped are 41 foot?

A. Not so very much. The usual length of logs shipped are from 32 to 40 feet. Occasionally we ship 28 foot logs for special orders. On account of the saving in freight charges and also other reasons we cut those logs into 42 foot lengths in order to get 14-foot multiples. For instance, for caps for a bridge structure, 14 foot logs are required, so we try to save money and in bringing logs out of the woods, and in freight charges, by getting a larger load on the car—we endeavor to load 42 foot lengths. It is close up to that, 42′ 6″ or 42′ 8″. By the way, all of them run six to eight inches longer than required. It is difficult to load 42′ 6″ or 42′ 8″ log without getting into trouble with the railroad company, on a 42 foot car. We have done that to some extent, principally our Pacific States operations; very little from our Mineral Lape operations.

Q. I understand you to say you thought the difference in the size of the car would probably make some difference?

[fol. 1325] A. I said I thought there were certain advantages of the 42 car over the 41 foot, but I doubt if in the actual operation of loading that you would get very much for the reason I have just stated, that the next length is 40 feet——

Q. I just had a memorandum from our carman stating that of the cars, not more than five per cent of the 41 foot flats have been equipped with bunks, so that bunk equipped cars are mostly the 42 foot cars. Is not the minimum loading the result of a rule, principally, that you send out much shorter logs; you send out 28 foot logs, which makes it much harder to reach a minimum?

A. As a rule, on smaller timber, we do not send out short logs. On the large logs, what we call large, old growth stuff, on which we have very little trouble getting a minimum, we do cut these into 24, 26, 28, and 32 foot lengths. 28 and 32 are usual lengths for those large logs, simply because of the fact that they are not cut into timber lengths; they are cut in the clear for the shorter lengths, into 12 or 14 foot or as near as we can to that, on account of their size and the number of feet in each log. You do not handle them with your machinery in logging out of the woods to advantage, and you would have a very excessive load on your car if they did not do that. But in smaller logs it is not our practice to cut shorter than 32 feet excepting in some cases of broken timber or length of a tree not working out. A very large proportion of our smaller timber is cut into 40 foot lengths.

Supervisor Cleland: Are there *are* logging cars used of less than forty feet in length?

A. Not in our service.

Supervisor Cleland: Are there on the Milwaukee?

Mr. Dudley: No. There are some taken over from the Pacific [fol. 1326] Eastern but I think those are the only exceptions.

Supervisor Cleland: Is that the general rule—40 foot is the general length of car used in logging operations, Mr. Balmer?

Mr. Balmer: Our men say all our cars are 40 to 43 foot.

Supervisor Cleland: How about the Northern Pacific?

Mr. Da Ponte: Practically all forty feet or over.

Supervisor Cleland: And the O-W?

Mr. Dudley: Same on that.

Q. Do you know whether the Milwaukee has a charge especially applicable to the logging dump in Tacoma, in their tariffs?

A. On the Milwaukee dump in Tacoma there is no charge in addition to the tariff freight rate on logs originating on the Tacoma Eastern, but on logs originating at other points on the Milwaukee they formerly charged fifty cents per car for cars unloaded at that dump, but have since increased that by 25%, making a present charge of 62½¢ per car.

Mr. Henderson: Let me offer this thought. A proposition has been made by the carriers. If this proposed tariff is filed as a tariff, the traffic bureau of the City of Tacoma, of Seattle, or of Spokane, or any place else, may come in and file a protest on that tariff and have a hearing, and not be bound by this record, and put in any evidence they want and reopen this matter for future hearings.

But if the carriers will submit the proposed tariff to us, in this proceeding, with the understanding that it is not to be prejudicial

[fol. 1327] to them, and that they would be willing to file that as a tariff, and let it go as part of thiscase, we will close this case.

But if they go on as indicated, I do not believe this Commission can use it and prevent any traffic bureau or organization from prolonging this case clean on into next year. I leave that as a suggestion.

Supervisor Cleland: You do not entertain any idea any traffic bureau will make such a move unless the loggers want them to?

Mr. Henderson: I do not know. We do not represent all the loggers in this State. If there is a new tariff filed there can be protests filed by anybody. If they come in under their proposition that they will submit a tariff to this Commission that they would be willing to file without prejudice, then we do not go up against any of these factors, and I cannot see where any body's rights would be hurt, and you would not open any possibility. There are loggers in here who have not appeared before, who are interested in this; there are loggers who have contracts, and when a new tariff comes in I do not believe these men or my clients can give any assurance it will not be opened up.

If they will file it we will stipulate that it may be filed as evidence in this case without any prejudice.

Mr. Balmer: Have you said anything that nullifies the statement made awhile ago, which I assume the loggers agreed to?

Mr. Henderson: Not a bit. I am simply leaving this with the Commission as a suggestion. As far as my clients are concerned, [fol. 1228] they are absolutely satisfied with my stipulation, but if anybody else opens it up we will have to come back.

Mr. Balmer: Everyone will admit that. As to any one not present or not represented here, it is obvious nothing can be said by either the carriers, or yourself or by myself, that would in any way prejudice or impair the rights of those parties to come in and protest and demand a hearing on the suspended tariff, but the understanding is that as to concerns present, the evidence which has been produced before this hearing is to be made applicable to the tariff filed and which will be suspended.

Mr. Henderson: That is another proposition. I am anxious to get this in in such a way as to close this case and not run up against the thing I am worried about.

Supervisor Cleland: If you do not care to cross examine the carriers traffic experts, we can issue an order within the next few days, which will do away with any hearing which will be had on the proposed tariff, that is, we will establish uniform log rates and direct the cancellation of that tariff.

Mr. Henderson: If you can forestall any protest against that tariff, I am satisfied. I am satisfied with the stipulation as far as I am concerned.

Recess until 1.30 p. m.

[fol. 1329] 1.30 p. m. October 29th, 1921.

Hearing continued, all parties present as before.

J. C. DICKSON on the stand.

Mr. Hayden:

Q. Mr. Dickson, are you acquainted with the tariffs of the Milwaukee, and particularly applicable to the Tacoma-Eastern Branch, showing the differential on loggings cars with patent bunks as against those without the bunks?

A. Yes, there is an additional rate assessed there for the use of all cars equipped with the patent bunk. To start with it was five cents per thousand and afterwards increased to 6½ cents, and now to 8 and 8½. On both of our rates the additional charge is 8½ cents per 1,000 feet.

Mr. Dudley: Those increases were the result first of the railroad administration, and second the order made by the State Commission; the general increase order of the Interstate Commerce Commission.

A. I might say that the railroad company took advantage of those orders and increased the charge for the use of the bunks, yes.

Mr. Dudley: Well, the rates were increased in the amount stated in those orders.

A. Yes, the freight rates were increased and the charges for the use of the bunks were increased at the same time.

Mr. Hayden: How much does that amount to, generally speaking, on a car for a year?

A. Well, under the additional rate of 8½ cents which we are paying, in the majority of cases now on the 6,000 foot minimum, or a 6,000 foot average, that would amount to 51 cents per car. Under [fol. 1330] the 7,000 foot average it would amount to 59½ cents per car.

Q. On the movement, that is per car per movement?

A. Yes, and I estimated that the returns to the railroad company on the cars as they are handled for us would be in the neighborhood of from 55 to 70 dollars per year.

Mr. Dudley: You say those were increased to 8½ cents?

A. Yes sir.

Q. Wasn't that increased to 8?

A. I have the rates here which I can read to you. At our camp 17 and Mineral the rates at present in effect on common bunks is $1.40½; on the patent bunk it is $1.59. To Tacoma the rate is $2.50 on the common and on the patent bunk $2.58.

Q. Those increases are on what minimum?

A. The minimum in effect on the Tacoma-Eastern is 6,000.

Q. That is on parts of the Tacoma-Eastern.

A. On all parts of the Tacoma-Eastern.

Q. Permit me to call your attention to the tariff; I call your attention to tariff GFD-13825-A, Items 80 and 85.

A. In answer to that I might say that those rates are obsolete so far as shipments are concerned. My answer relates to movement of logs as they are existing today.

Q. The rates as shown by the tariff provide from Kirby, Tidewater, Electron, Holz and Calpenham the minimum is 5,000 feet?

A. That is correct, but there are no logs moved under that tariff at the present time, neither is there any logs moved under that tariff for nearly two years.

Mr. Hayden: The logs are all off from that territory, are they not? [fol. 1331] A. Well, I wouldn't say that the logs are all off, because after any territory has been logged you will find some scattered pieces on which timber still stands, but so far as our own operations are concerned, the logs are all off, and there is nothing else that I know of that is making use of those rates at this time.

Q. Generally speaking, this territory has been logged off—in a general way?

A. Yes sir.

Mr. Dudley: Let me call your attention to the fact that there is claim now pending before the Commission based on a 5,000 minimum on this particular tariff that—with movement within the last year.

A. I have heard some talk of that claim although I am not familiar with it and know nothing about it, although I might say that what I have heard here about it related to past shipments and there are not any shipments of recent date.

Mr. Dudley: They are shipments within the past two years, all shipments prior to that time being barred under the provision of the statutes.

A. Was that a substantial movement?

Mr. Dudley: I don't know, Mr. Dickson.

A. Perhaps Mr. Eccles knows.

Mr. Dudley: I don't know; I desire to call your attention to the tariff.

Supervisor Cleland: Perhaps that accounts for the difference. Where do you get your 8 or 8½?

A. Mr. Dudley is getting the matter confused, I was testifying about the additional rates for the bunks. The question of minimum [fol. 1332] has nothing to do with this additional rate spoken of on the bunks. In other words, I am answering one question on direct testimony and he is cross examining me on an entirely different matter.

Mr. Hayden: In other words, that is your testimony now?

A. Yes, it is not changed. I think we are paying from 8 to 8½ cent per 1,000 additional for patent bunks over the ordinary flats.

The Director: How do you get the 8½?

A. I get that from their tariffs, Mr. Director. Those are the rates on which we have to pay, and I was just in the process of reading from the rates when Mr. Dudley inter-upted me.

The Director: The five cent rate increased twice——

Mr. Dudley You named a rate of $2.50 for the unequipped car and $2.58 for the equipped car?

A. Yes sir.

Q. That would be 8 cents?
A. Yes sir.
Q. And what was the other?
A. The other was to Mineral; it was $1.40½ for the common bunk and $1.59 on the patent bunk. Now from camp 14 to Kapowsin the rate is 2.19 on the patent bunk and on the common bunk $2.12½. From Camp 17 to Elbe it is $1.40½ on the common bunk and $1.49 on the patent bunk. The rate from camp 17 to Milan on the common bunk is 2.11½ and on the patent bunk 2.19. That is 8½ cents. The rate from Camp 17 to Saltice Junction on the common bunk is —and on the patent bunk 2.19.
Mr. Hayden: That is where the movements are taking place at this time?
[fol. 1333] A. Well, I say, where the movements are taking place at this time—there is no movement at this time from Camp 17 to Elbe, simply because the mill at Elbe is closed down, but when they are running we ship them part of their supplies at times. Now I can give you additional rates if you desire, showing that in the majority of cases the difference is 8½ cents.
Mr. Dudley: The exhibit is introduced in evidence and that is the best evidence.
A. I think Mr. Director in answer to your statement, while I can not say I have figured it out, I have the idea that the reason for the difference between the 8 and the 8½ cents I think is—that they took the rates on the ordinary flats—their former charge was 6½ cents for the patent bunks and then they take 25 per cent additional and they add the fraction of a cent—in other words, they don't sp-it on anything less than half a cent, and if the fraction that they have to add the half cent why that makes 8½ cents difference; and if the fraction is under a half cent why they go down to 8 cents.
Mr. Hayden: All these figures are exclusive of war tax?
A. Yes sir, the three per cent war tax is not included in any of these figures.
Q. Or in any of the rates you have mentioned?
A. No sir.
Mr. Dudley: Mr. Dickson, you spoke of the Cascade Timber Company and the Pacific State Lumber Company, and you have been connected with these companies and their predecessors along about 20 years?
[fol. 1334] A. I said that I had been connected with these companies since their inception and that there was some of these companies or their predecessors—I have been connected with them for a period of 20 years.
Q. Is the Cascade Timber Company the descendant of the old Cascade Lumber Company and then followed by the Northern Timber Company?
A. I think we never had a company called a Cascade Lumber Company, Mr. Dudley, but the Cascade Timber Company is an older concern than the Northern Coast Timber Company, and at one time we had a strictly operating company by the name of the Northern

Coast Timber Company; and afterwards the two companies were consolidated.

Q. And were you connected with the Northern Coast Timber Company?

A. Yes sir.

Q. Well, that was followed by the Cascade Timber Company?

A. Yes sir.

Q. And you were connected with them in its inception?

A. Yes sir.

Q. The log rates on the Tacoma-Eastern really originated in a contract between the Cascade Timber Company and the old Tacoma-Eastern Railroad Company made in March, 1903?

A. No sir, that is not correct.

Mr. Hayden: Objected to as immaterial.

Mr. Dudley: That is not correct?

A. No sir.

Q. That contract of March 11, 1903 with the Cascade Timber Company and the Tacoma-Eastern Ry. Co. fixed the ra- of $1.00 per [fol. 1335] thousand for certain shipments which were to be made by the Cascade Timber Company, they at that time being engaged in logging for the St. Paul-Tacoma Lumber Company upon some St. Paul & Tacoma Lumber Company's land.

A, That was on certain rates to Tacoma?

Q. Yes. And that arrangement was in effect at the time that contract was entered into between those points and Tacoma, and we had a scale of rates at that time, distance rates, which began I think with 50 cents per 1,000 for from five to ten miles.

A. Wait a minute. I can tell you exactly. 50 cents per 1,000 for five miles, 60 cents per 1,000 for 10 miles, 70 cents per 1,000 for 15 miles, 80 cents per 1,000 for 20 miles, etc. between points on the Tacoma-Eastern south of what was then Bismarck and is now Hillsdale.

Q. And then there was another tariff of 50 cents per 1,000 from Bismarck to Tacoma?

A. Exactly. That 50 cents per 1,000 by the way included the handling from the Northern Pacific tracks at Tacoma.

Q. Aren't you in error in that particular, wasn't there a separate charge for handling on the Northern Pacific tracks that the Tacoma-Eastern collected from the St. Paul & Tacoma Lumber Company an extra charge, that the Northern Pacific imposed for handling over their tracks?

A. There was 50 cents a car, I believe, as a dumpage charge there.

Q. And that was paid to the Northern Pacific?

A. Yes sir.

Q. And repaid to the Tacoma-Eastern by the St. Paul & Tacoma Lumber Co., or the shipper?

[fol. 1336] A. Yes sir.

Q. You were connected there in the early days were you not with the Tacoma-Eastern?

A. Yes sir.

Q. You were traffic manager?
A. Yes, and if you go back far enough you will find I was connected with other railroads prior to that date.
Q. You were traffic manager were you not in 1903, 4, 5 and 6 along about that period?
A. I think so, the dates are not clearly in my mind.
Q. And as traffic manager you promulgated these various tariff rates?
A. Yes sir.
Q. Suppose you give us in a general way the history of the rates on the Tacoma-Eastern.

Mr. Hayden: I object to that as wholly immaterial, I am not asking him anything about that, I think certainly it has no bearing upon this situation.
Mr. Henderson: It is certainly not cross examination of this witness.
The Director: If you want to call him as your own witness.
Mr. Dudley: All right we call you for that purpose.
Mr. Hayden: And now we object to it as immaterial.
The Director: I think you had better finish your cross examination first, then if you wish to call him you may do so.
Mr. Dudley: I think that is all.

Mr. Robbins: You spoke about other commodities that were equipped with bunks?
A. Yes.
Q. What kind of commodities were you referring to?
[fol. 1337] A. Principally lumber.
Q. Do you wish to be understood as saying that it is common practise to ship lumber on these cars equipped with bunks?
A. I do, positively.
Q. It is the general practise in your territory to ship lumber on cars equipped with patent bunks?
A. Well, I am thinking solely about my answer to be sure that I understand your question. I say that it is a common custom to ship our lumber locally to Seattle and Tacoma on the cars that are used for the hauling of logs, and that we do load the cars equipped with patent bunks as well as those which we load with the wooden bunks.
Mr. Hayden: That was not my question. I wanted to know if it was common practise in your territory to ship lumber on cars equipped with patent bunks.
A. Well, I have tried to answer that question in such a way that it would not be misunderstood. Now it is not common practise, I mean by that it is not common practise in this way—most of our lumber that we produce is not shipped on this class of car. Most of our lumber goes East. But I do say that on the majority of cases on our local shipments we do use the log flats that are equipped with patent bunks for our shipments of lumber.
Supervisor Spinning: That is in western Washington?
A. Yes sir.

Mr. Hayden: And that is whenever logging flats are not in demand for logging purposes?

A. Usually that way. I might say that when we make a loud enough noise about it the railroad company put their foot down for [fol. 1338] a time on the use of logging flats for that purpose, but in doing that we are between the devil and the big sea because then we have not equipment enough to move our lumber, those of us who are sawing logs.

Q. You have certain cars assigned to your service, to your logging service?

A. Not generally speaking; at our Pacific State operation they generally keep about the same number of cars in the service but they are changed frequently and we may check up every week and find a different number, a different quantity in the service. There are no specific cars that are kept in our service.

Q. As I understand your testimony, whenever you have a bunk car and are logging you of course will use that in your logging service?

A. Yes sir.

Q. You would not load it out with lumber or anything else?

A. No.

Q. Now then if you shut down in your logging operations do I understand that you use all of these bunk cars for lumber shipments?

A. I may say, when we shut down with our logging we don't have much use for the cars, for lumber.

Q. That is the point, when you cease logging you cease cutting lumber don't you?

A. Not altogether, but we don't ship much lumber locally very long after we stop logging.

Q. Then where is the lumber for this particular number of cars you are shipping out, which cars are equipped with bunks? You [fol. 1339] have said that you use the cars in the logging service when you are logging, but when you shut down logging you don't have any lumber shipments to speak of?

A. I don't know what you are getting at. In other words, I think you misunderstood the situation. Our logging and our milling are not connected. The logs are handled to our plant and unloaded by the Milwaukee with their own power, where the logs are shipped to our two mills. When they are shipped to other mills, or shipped to Tacoma, the same condition applies, so that there is hardly any distinction; they are taken out of there. When we want some cars to load lumber we file an order with the railroad office for the cars we need and give them the destination, and they fill those orders for our mills together with the orders of the other mills on the line and we have nothing to do with how the cars are assigned. In other words, the logging and the milling are independent so far as the car supply is concerned. We have no more control over it than the mill men not logging, except that I will say this—that we make our logging paramount for the reason that when we are short a car of logs in the woods—in other words, we are capable of loading

15 cars a day and only receive ten, our cost is increased just 50 per cent. We can get by in the mills on the shortage of cars for the time being, without any material loss, but when we have a shortage of cars in the woods, all of our labor expense there is gone and we cannot save ourselves on it; so that on the question of log flats we like to have the log flats for the woods and we let the mills, our own mills included, take care of themselves in the ordinary course, and I think the Milwaukee officials will bear me out in that if they care to, that they have never heard me come to them and holler for the log flats on which to load lumber when our camps were run-
[fol. 1340] ning, unless we were perhaps the only camps running at the time and there was a great supply of cars. But as we have been working most of the time there has been no great supply of cars.

Q. You spoke about other commodities, other than lumber. What other commodities?

A. I said principally lumber.

Q. What is the other thing, the other commodity?

A. I would mention poles for one thing and wood for another.

Q. What kind of poles do you ship out?

A. Cedar poles.

Q. Telephone poles do you mean?

A. Telephone poles, poles for anything—anything that cedar poles are used for. They are used for other things besides telephone and telegraph, but I am speaking of cedar poles now.

Q. And these shipments that you spoke about are moving locally to Tacoma?

A. The cedar pole shipments are moving locally to Tacoma and there is some handled at Salsich Junction on the Tacoma Eastern.

Mr. Hayden: It is true however, Mr. Dickson, isn't it that cars with bunks are assigned to you at times for use for lumber shipments and are used by you?

A. Yes sir.

Q. Whenever they are so assigned?

A. Yes sir.

Q. There is no physical reason why they could not be so used?

A. No, and I don't want a misunderstanding here as to the quan-
[fol. 1341] tity we use, and we do use them; and when I say that I mean the other mills to-. I am speaking now of the industry, not from my personal company's operations. They are used to quite a large extent. Take this here for instance, and it has been so in past years, and even in greater quantities this year. We are moving large quantities of lumber for export shipment from the Port Commission's dock at Seattle and from the Port Commission's dock at Tacoma. It is not just a straggling car or two; I hate to estimate the number of cars that are going to those docks every month for that purpose, but I venture to say that there has been over 100 cars for that purpose this past month, and I believe I am very conservative in saying that.

Q. 100 bunk cars?

A. I say 100 log flats, I am not in a position to say how many were ordinary flats and how many were bunks, there would not be any distinction though. I think that is where if a millman had any choice about it he would take the plain flats.

Q. He could use either?

Mr. Balmer: If I get that last answer the bunk on a car doesn't have anything to do with availability or value for shipping lumber?

A. No sir. It adds to its weight and there is no allowance made the shipper of lumber for the additional weight.

Q. How much do the bunks weigh?

A. I couldn't tell you.

Q. So that the absence of a bunk on a car for any other purpose than handling logs is a disadvantage both to the railway company and the shipper, to the railway company because it adds to the tare [fol. 1342] of the car and requires the railroad company to allot more weight to the shipper because it added to the tare of the car which is not stencilled on the side of the car, and possibly causes him to pay more in freight.

A. There is a slight disadvantage there.

Supervisor Cleland: I don't quite get that; you say it adds to the expense of the carrier because he has to haul it for nothing, and you say it added to the shipper because he had to pay for hauling.

Mr. Balmer: It works both ways.

Supervisor Cleland: If you are getting paid for hauling it I don't see where you are losing anything on it.

Mr. Balmer: Doesn't he have to haul the empty car back, and furthermore, if our figures are correct—that will be argument.

Mr. Dudley: These open cars can be used for the shipment of lumber only for short distance, we would not be willing to ship lumber to Minnesota transfer in these open flat cars, would you?

A. On account of logging being the main part of our business I would protest very severely because it would be shipping log flats out of the country.

Q. And also the lumber suffering some deteriority and stains, etc. being transferred for long distances?

A. Oh, we have not shipped—we are not shipping timber in open cars, the timbers are shipped in gondolas and flats.

Mr. Dudley: I am referring to the lumber.

[fol. 1343] A. Well, that is a part of your timber, we don't ship lumber on an ordinary flat either.

Q. I am speaking now simply of open cars, in other words the open car is not adapted to the shipping of lumber for any distances.

Supervisor Spinning: You mean the best lumber or rough lumber?

Mr. Dudley: Either the best or the rough, take the best lumber, you would not be willing to ship that in an open car?

A. I may say there is a great deal of criticism among the shippers because the Milwaukee has a large amount of open cars, and when conditions are normal we have not enough open cars unless they secure foreign equipments to ship our lumber east. There is

two classes of equipment, one the box car for our smaller size and what is called our yard stock, and the open stake car is required for the heavier construction work.

Q. That is the heavy timbers and lumber as distinguished from timbers, you prefer to ship it in box cars?

A. Yes sir.

Q. And you use these open cars for the shipment of lumber simply when the box car is not available?

A. No, that is log flats you were speaking of now, their place could only be taken by an ordinary flat car, or in some cases a gondola, because the class of materal we ship on those cars would not be readily loaded in box cars on account of the inconvenience of handling at the boat side, there they have to be handled by the ship's swing and really must be handled in open cars.

[fol. 1344] Q. That is all heavy material?

A. Largely so, but not altogether so.

Q. With very long boards in it?

A. Principally the heavier stuff, although there has been a good deal of one inch stuff. We are shipping inch by inch and a quarter stuff to Japan at the present time. The last month we shipped there 50,000 feet of inch and a quarter by 12, 6 feet long, from our mills to Japan over the Milwaukee line to Tacoma, and that was all loaded in open cars because of the very reason I am telling you, that it is not practical to handle them out of the box cars onto the ship.

Q. Your use then of flat cars for the shipment of lumber is largely confined to shipments to Seattle and Tacoma for export traffic?

A. Yes sir. That is practically all the local business we have.

Supervisor Cleland: Mr. Dickson, should a uniform scale of logging rates be based upon distance, should we adopt a distance scale?

A. Well, if you are asking my personal opinion of that Mr. Cleland, I think it should. But my own opinion is that there are two distinctions in the log traffic on logging rates. I am not speaking for the trade now, I am giving you my personal opinion, and that is that there should be a train load distance rate and a single car distance rate.

Supervisor Cleland: How many cars could constitute a train load?

A. I think ten cars or more.

Q. What steps in miles would you break the rates?

[fol. 1345] A. I think in five mile steps.

Q. To what point, or would you continue that indefinitely?

A. I think that they could be continued indefinitely, although I may say that I have never followed it out further than 75 or 80 miles say, but I think it would work out all the way through.

Q. What percentage or difference should there be per carload between a trainload rate and a carload rate?

A. I would think about 20 per cent.

Q. The single car rates should be 20 per cent greater than the car rate in trainload?

A. Yes, sir.

Mr. Dudley: Would that discriminate in favor of the large shipper as against the small shipper?

A. I may say, Mr. Dudley, in answer to that question that generally speaking, no. I think our own concern would probably be discriminated against, if you wish to use that word, as much as anyone, for the reason that the average logging side which is ordinarily a pretty poor side that doesn't get about ten cars per day to the side; and the smallest logger cannot work with less than a side very well. Now then, the reason, I say, we would be discriminating against ourselves perhaps as much as anyone else, under most logging conditions there is only one movement of logs. In other words, the logs are moved from that camp to tidewater, or the entire shipment of that camp goes to some particular mill. We have inherited some from the old Tacoma-Eastern days—the obligation you may say of taking care of a number of small mills on the Tacoma-Eastern [fol. 1346] and it breaks up the shipments at times from our camps, where we have to supply those men with five cars and another man five cars in order to take care of his daily requirements. He has no storage capacity and his requirements must be taken care of daily so that to that extent we wouldn't penalize ourselves on those shipments. In other words, we would be unable to secure a train load rate, altho we might be putting out as we are doing from 30 to 40 cars per day at one camp and about 25 cars per day at the other; but on the shipments where we can ship in larger quantities of course we would get the benefit of the trainload rates, but the average shipper—and that is true of the men who are doing their own logging—in other words, logging to his own mill, which he generally does, his entire output from the camp goes from one point to another, and he can take advantage of the trainload rate. The smaller logger doesn't take care of the small mills in that way because he is not able to on account of their limited storage—they have to depend on someone else to take out a certain quantity of logs. In other words, if two or three mills are calling for five cars of logs per day you cannot regulate the capacity of your camps down so fine as that. You are required to move your equipments some days, and you have wrecks, and that man would be out of logs, but where we have a large production of logs and supplies we can put the surplus into tidewater and that is the only way we can take care of the small mills, is by putting it into tidewater; so we would be penalized more than even the small logger who is working only one side, and whose entire output and side goes to one point.

[fol. 1347] Mr. Dudley: How would that take care of the situation in car shortage, the logger would order ten cars and the railroad company would furnish him with eight, would that go on the ten car rate?

A. I think that the railroad company has not a supply or equipment to move it under that rate, that when the logger is penalized by having to increase his cost by having to pay the cost of loading eight cars for the same amount of money he could have loaded ten,

that the railroad company would likewise stand it when it was its own fault.

Q. That would open the door, wouldn't it, to parties who desire to take advantage of that situation, order a larger amount of equipment, ten cars or more, when they knew the company couldn't furnish them even tho they themselves didn't have use for that amount, and by that means they would secure the trainload rate when they were not entitled to it?

A. Not to any extent for the reason I have just stated, that the average capacity of the one side is about ten cars, and that man is going to go broke pretty soon if he tries to operate and is only getting five or six cars, because his costs are going to be about doubled.

Supervisor Cleland: Well, along that line as suggested by Mr. Dudley, would it be of any advantage, or would it be fair to make the trainload a less number of cars than ten?

A. No, my suggestion would be ten, but simply to be hauled at the railroad company's convenience. When they didn't have the cars to supply the full quantity of ten, but if the shipper on the [fol. 1348] other hand fails—if he orders ten and fails to load the ten, I don't think that he should be allowed to take advantage of the conditions in that way. In other words, I am inclined to think for the railroad company's protection that they should be left in their hands.

Supervisor Spinning: Wouldn't the demurrage fee protect that in part?

A. It would, yes; the demurrage would prevent the carrying over undoubtedly, the carrying over of cars.

Supervisor Spinning: Do you think any of these troubles would arise in this matter if the company had an ample number of cars to meet their demand?

A. No, sir, I don't see how they could.

Mr. Balmer: Do you think it would be one of the best ways for the railroad company to insure their rates to put the rates high enough so that they could buy some equipment.

Mr. Henderson: Maybe if they did furnish the cars they could get enough traffic to get some.

A. I can take the afternoon if you want to and go into the realm of conjecture and give you some of the same medicine.

Mr. Dudley: Getting away from that, you spoke of ten cars as a train load lot, now as a matter of fact ten cars would be a very light train wouldn't it?

A. Yes, speaking in the term "full train," but I am speaking of the word trainload lot as a term to define the two classes of rates, and I am not defining it maybe insomuch as the railroad company, as picking up ten or more cars at one time with one switching to [fol. 1349] deliver it to one point as against switching those ten cars to the ten different switches and ten different deliveries.

Mr. Dudley: The cost of operation of the train of course as light as ten cars, per car would be manifestly very much greater than 20 or 30 cars?

A. That is quite true.

Supervisor Cleland: You mean line haul?

Mr. Dudley: Yes, line haul. Now what you said indicates that the *the* logger should order ten cars and then use seven, that rate should apply——

A. Single car rates.

Supervisor Spinning: And the idle cars would be subject to demurrage?

A. Yes, sir.

Mr. Da Pnte: Well, if they were released there wouldn't be any.

Supervisor Cleland: That is, if they ordered them and they were delivered.

E. E. CHINN, a witness produced on behalf of the Associated Loggers, after being first duly sworn, testified as follows:

Direct examination.

Mr. Henderson:

Q. Your name is E. E. Chinn?

A. Yes sir.

Q. You are in the logging business?

A. Yes sir.

Q. With what company?

A. The Chinn Timber Company.

[fol. 1350] Q. Are you identified with the Loggers Information Bureau?

A. Yes sir.

Q. What position do you hold with them?

A. Vice-President and manager.

Q. While on the witness stand the other day Mr. Webb testified with reference to an accounting sheet and classification of accounts. I think your Associated Loggers' exhibit No. 8—I will ask you if that is the manner in which the accounts testified to by Mr. Webb are kept?

A. Yes sir.

Mr. Henderson: We offer that in evidence.

The Director: It will be admitted.

Mr. Henderson: I would like to make a reservation that if for any reason the stenographer discovers that these are not numbered consecutively that he may change the numbers on them properly.

The Director: Yes.

Mr. Henderson:

Q. Handing you this, which is marked "Associated Log Shippers' exhibit #9" I will ask you if that is an analysis of the accounting system.

A. Yes sir.

Mr. Henderson: We offer that in evidence, and we only have one copy, the same as Mr. Da Ponte had the other day when he introduced one copy.

The Director: It will be admitted.

(Marked "Associated Log Shippers Exhibit #9".)

Mr. Henderson:

Q. Now I hand you a book marked "Consolidated statement of logging costs, January 1st to June 30th, 1921; another one marked same for the period, for the calendar year 1920, and another one [fol. 1351] marked for calendar year 1919, and another one marked for the period of calendar year 1918, and ask you if those are the reports of the logging costs of the companies reporting to the Loggers Information Bureau?

A. Yes sir.

Mr. Henderson: We offer this for inspection, but not for the record because it cannot be put into record. I must have them myself.

Mr. Dudley: I will object to that for this reason, although I don't want to be technical at all, your honor, understand that under the condition of the Supreme Court of Washington all cases reviewed in the Superior court must be reviewed upon exactly the same evidence which appears before the commission. Now they are offered for inspection and practically they become exhibits, and yet if the case were taken to the Superior court for review that court would not have them. That is my objection. This commission by reason of the provisions for the review is limited in the ways in which it can handle testimony.

Mr. Henderson: Well, we say we have put them in for them to inspect them, we have no objection whether they do or do not. We brought them here that they might be inspected in response to the insistent demand that they should be brought here, but if they don't want to inspect them we will not insist on it.

Mr. Dudley: I understood your proposition was to have the commission inspect them.

Mr. Henderson: Anybody can do so, so that we withdraw the offer.

[fol. 1352] Mr. Da Ponte: There has nothing come out in connection with the witnesses testimony to give me to understand how the accounts were made up, so I shall no longer be insistent about it.

Mr. Henderson: I will ask you if in these reports and in that statement of accounts as evidenced by Associated Log Shippers exhibit 8 there is evidence of transportation costs to the loggers and to each of them for the period covered by these reports.

A. Yes sir.

Q. And in that transportation cost which was testified to by Mr. Webb is there included transportation costs by a logger on his own road and transportation costs of the common carrier?

A. In the case of common carrier loggers that is true.

Q. One thing I wanted to try to make plain in the records, you are familiar of course with logging operations?

A. Yes sir.

Q. And in operating, as has been explained here, one side is the smallest unit that a logger operates?

A. Yes sir.

Q. And are ten cars required for the operation of that unit?

A. I should think so.

Q. That is practically the minimum requirement for a respectable one side operation?

A. That is my opinion.

Q. And unless the ten cars are furnished the one side cannot be operated to its capacity?

A. I think that is true.

[fol. 1353] Q. And ordinarily then this would be true—it would be true to say that the average logger offers to the carrier a unit of ten cars——

A. Yes, if he is getting any results, that is one side, he usually will produce ten cars. I should think so.

Q. Now in the case that those ten cars were destined to different destinations the cars would move in single car lots would they—I mean if the destinations are several the number of cars moving to one place and a number to another, a single car lot——

A. Assuming that the ten car rates were named, that would be the case.

Q. So that the entire ten car rate would only apply in case the cars were going to one destination?

A. Yes sir.

Q. But insofar as the loggers with this association are concerned they would be satisfied with that kind of an arrangement, that an entire unit output going to one destination should take the train-load rate, but where the unit's output was split going to various destinations it should move under the single car rate?

A. I think that would be a good arrangement.

Q. Now have you something to say with reference to the demurrage rules?

Mr. Da Ponte: Do you think you ought to go into that uniform demurrage clause? Usually the commission wouldn't want to take that up in this hearing.

Mr. Henderson: I am not putting that in here with the idea of having it at this hearing—having the demurrage rules changed, but to show how it operates with the logger.

[fol. 1354] Mr. Da Ponte: Would that be material unless there was going to be some remedy offered for it?

Mr. Henderson: It might be to this extent, that with reference to the delay of the car the real revenue that the carriers receive from that movement might be affected by the demurrage.

Mr. Da Ponte: As a matter of fact, there is no money in demurrage to the carriers. Everyone knows that. I am just suggesting that because it is a tremendous subject.

Mr. Henderson: I think Mr. Da Ponte is probably right on that. If we opened up the demurrage question at this time it would probably involve something that was not really involved in this case.

because I understand the commission could not change the demurrage rules under the complaint.

The Director: Probably not.

Mr. Da Ponte: Aside from that I don't think the commission would want to do it at this time.

The Director: We don't want to prolong this hearing.

A. If it is permissable aside from the record I would like to say it would cause me irreparable damage.

Mr. Da Ponte: It is simply consuming time which is getting scarce.

Mr. Henderson: You are terribly anxious about time right now. Now Mr. Chinn, have you anything else aside from the demurrage to say in reference to the logging situation?

A. Well, I don't know unless I would testify as to my own company which operated on the Bellingham and Northern railroad and has operated there for 20 years and still operates. We furnished our own side track and terminals at the shipping end with the exception of the rails which we leased from the Milwaukee Railroad. [fol. 1355] At the Bellingham terminal we furnished the log dumps, and I am at the head of the concern that owns and operates it, and the dump is over a half mile long. It serves the Great Northern, Northern Pacific and the Chicago, Milwaukee and St. Paul Railroad. The dump track is over a half mile long. The entire train can be run directly there and unloaded into deep water at any time of the day; tide complications have no effect.

Mr. Henderson: And you have your own terminals at both ends?

A. Yes sir. There is no delay as far as that is concerned. I, as a man have been engaged in the logging business for 20 years—there is no delay at either end of the operation so far as the delivery of the cars to the main line is concerned, or as to the dumping of the cars at the terminals is concerned.

Q. Now you are also secretary of the Associated Log Shippers, an association that was organized for the purpose of investigating matters concerned in this case?

A. I have simply volunteered, or was asked to act as treasurer of that informal institution.

Q. And has there been filed with the commission a list of the loggers who are reporting to this association called the Associated log shippers?

A. I believe so.

Q. And that has been filed with the commission?

A. I believe so.

Q. Have you a copy of it with you?

A. I have not.

[fol. 1356] Q. Can you get it?

A. Yes sir.

Q. The logging information bureau as such has never appeared in this case and has employed no one to appear for them?

A. No, sir.

Mr. Da Ponte: Could we get a copy of that list, Mr. Calderhead?

Mr. Calderhead: Certainly.

Mr. Da Ponte: Let me see it.

Mr. Calderhead: We will furnish it to you. It is in the office files.

Mr. Da Ponte: According to this account purporting to be a uniform classification account the items of damage caused to timber with reference to the original price paid, does it?

A. Yes — I will state that I am not qualified to testify as to the method of accounting.

Q. So then there is not anything in this from which we could get that?

A. I couldn't tell you.

Mr. Henderson: That was all gone into with Mr. Webb.

Mr. Da Ponte: You couldn't state how the accounts are made up then from the book itself.

A. I don't know.

Q. You say stumpage—and under that cost of and appreciation, March 1, 1915, did you mean the increase in market value between the time it was brought and the date of March 1, 1913.

A. I couldn't say.

Mr. Henderson: We object to any further cross-examination of [fol. 1357] this witness with reference to what the accounts include and how they are made up, as the witness has testified that he didn't know and we had a witness on the stand who did testify.

Mr. Da Ponte: You put it in by him.

Mr. Henderson: We simply put — in by him. That is all.

Mr. Balmer: The witness you had on the stand didn't produce this book.

Mr. Da Ponte: Where is Mr. Webb?

Mr. Henderson: He is right here. We didn't run him away. You can have anything we have except our money and you are taking that.

Mr. Da Ponte: What per cent of the capacity did the members of the association produce? To what extent are they running, do you know?

A. You mean to what extent they are running?

Q. Well, yes. Suppose a logger has a capacity of 50,000,000. What per cent of that is assigned to him to produce?

Mr. Henderson: I object to that as incompetent, irrelevant and immaterial and not proper cross examination of this witness. This witness has testified to nothing of that kind.

Mr. Da Ponte: If we had, I would not be asking him questions.

Mr. Henderson: Just what he testified to you didn't try to examine him on.

Mr. Da Ponte: I submitted the proper question.

Mr. Henderson: This witness has not testified to that.

Mr. Da Ponte: I am asking him about it. I don't care whose witness he is.

[fol. 1358] Mr. Henderson: Who have had other witnesses on the stand.

The Director: Let him answer if he can, we are not very technical.

A. As to the percentages I cannot say. During the first part of the year they generally, the common carrier railroad log shippers were shut down, at least for a portion for the first six months this year. Many of them during all the period. Since the 1st of September there has been a more general resumption of logging on the part of the railroad shippers. The salt water shippers have been running pretty generally throughout the year.

Mr. Da Ponte: Well, about the 1st of the year we had in mind, what per centage of the logging capacity was assigned in order to regulate the production of logs, what was the percentage that was being produced about the 1st of the year, of your capacity?

A. Well, the first of every year, every year since I can remember there was no production of logs because everybody was shut down.

Q. Yes, but I am talking about that general period.

Mr. Henderson: What do you mean by that "was assigned"?

Mr. Da Ponte: Well, wasn't there an assignment to each logger of the amount he was supposed to produce?

A. Not that I know of.

Q. You never knew about that and don't know it now?

A. No, sir. Did you ask me if there was anything further that I cared to testify to?

Mr. Henderson: Yes.

A. There is only one thing further that I think interests me as [fol. 1359] representing the Chinn Timber Company. My operation is not as large as a great many who have testified here during this hearing, but it has been as constant as any other, and I hope to make it so in the future; but being a smaller logger I am very much concerned with the expenditure of my money on this increase of rates that I am now paying, and in that I think I speak for many other small loggers. That is all I have to say.

Mr. Henderson: Well, Mr. Da Ponte wanted a list of those loggers which has been furnished to the carrier. I will hand it to him now.

Mr. Da Ponte: I would like to read this into the record.

Lake Riley Lumber Company,
Florence Logging Company,
Clarke County Timber Company,
West Fork Logging Company,
Cherry-Valley Logging Company,
Chenalis Mill Company,
Lodell-Donovan Lumber Mills,
Cedar Logging Company,
McCoy Logging Timber Company,
Wallace Falls Timber Company,
North Bend Lumber Company,
Sound Timber Company,
Christie Timber Company,
Chinn Timber Company,
Sunken Railway & Timber Company,

Great Northern Lumber Company,
Buckley Logging Company,
Stephens-Bird Lumber & Logging Company,
Northwest Lumber Company,
McNeill-O'Hearne Company,
Nestos Timber Company,
Puget Sound Saw Mills & Shingle Company,
Mason County Logging Company.

Mr. Henderson: Now we would like to have considered as introduced into the records Northern Pacific Tariff No. 86-n, I think it is, at least it is the tariff with reference to the charge for the use of terminals at Tacoma and for the Dump at Tacoma.

[fol. 1360] Mr. Da Ponte: I want to read into the record this little section from this accounting filed by Mr. Chinn.

Mr. Director: The whole book is in the record.

Mr. Da Ponte: Yes, but I want it before them. This headed "Stumpage" and under that "Cost of Timber" "Appreciation March 1, 1912" "Carrying charges capitalized after March 1, 1913," then "Total Stumpage Cost." That is all.

Mr. Henderson: I want the tariff identified as Northern Pacific No. 86-U. I am informed by the tariff department that that is the tariff which shows the extra charge made by the Northern Pacific for the use of its dumping ground.

Mr. Dudley: As I understand from you, if the logger shipped ten cars and consigned to different consignees they should pay the single car rate.

A. I gave that as my opinion.

Q. That would operate to increase the cars of the logs shipped in that manner over the cost of the logs shipped in the ten car rate?

A. Yes.

Q. And that cost would be borne by whom, by the latter or by the consignee?

A. I could not say.

Q. Now suppose the logger ordered ten cars and doesn't ship but seven. What rate should he pay? The ten car rate or the single car rate?

A. I think it depends on whose fault it is that he don't ship but seven.

Q. Suppose the railroad company furnishes the ten cars and he is unable to ship but 7?

[fol. 1361] A. Well, I hate to give an opinion which would injure the small logger but I would say that in all fairness probably the single car rate should prevail.

Q. Now in connection with that where would the railroad company receive any compensation for the three extra cars which had been furnished?

A. Through demurrage, I presume.

Q. Demurrage is not compensatory, is it? That only accrues after a certain delay.

A. I don't know.

Q. And it is not a transportation charge but a penalty for delay?

A. In answer to that I would say that for probably a period of ten years, up until the fall of 1921 I have ordered cars repeatedly, day after day, and week after week, and have not received what I ordered, and no penalty attached to anybody but me.

Mr. Henderson: May I ask a question here to clear it up. If he only used 7 cars and ordered 10 that day, he would probably use the other three the next day wouldn't he?

A. Yes, certainly.

Supervisor Spinning: You say in the last ten years you have never received a full order of cars?

A. I didn't say that, I said I had repeatedly entered my order for a definite number of cars and had repeatedly not gotten them, and there was no penalty attached to anyone but me.

Supervisor Spinning: What reason was given by the company for not furnishing the cars you ordered?

[fol. 1362] A. Well, no particular reason was given that I recall, but the understanding was and it has been that there was not sufficient equipment owned by the company suitable for the hauling of logs.

Q. Are you quite conversant with the operations of the loggers on the sound as to their supply of equipment on this line; that is, have the loggers been receiving the equipment they have ordered necessary to carry on their business?

A. I believe the prevailing conditions for some years past—there has been chronic shortage of equipment.

Q. And you believe that has worked to the disadvantage of the logging industry?

A. Unquestionably.

Q. To the financial injury of the logger?

A. Yes sir.

Mr. Henderson: Many other loggers have their own investment to handle a certain amount of traffic. They cannot get the carriers to take care of the traffic they would like to produce and for which they have an investment.

A. That is correct.

Mr. Dudley: How about the situation of the carriers when the loggers shut down and the carriers have equipment for the loggers and have to tie it up?

A. In answer to that question I will say—when the fruit crop in eastern Washington is growing what did you do with the refrigerator cars?

Mr. Dudley: We used them for some other purpose.

Supervisor Spinning: How much of the time have the railway company been short of the equipment used in the logging business?

[fol. 1363] A. I can only state for my own company—that during the period I have named until this fall I have never received adequate cars to load my output.

Supervisor Cleland: Do you subscribe to the answers made by Mr. Dickson as to my questions concerning the proposed uniform rate?

A. As to the distances?

Q. Distances and breaks in the distances, and the differences be-

tween the train and car load rates—the minimum number of cars in a train load.

A. Generally speaking, I think so but I think that this commission could bear in mind one danger, and that is that year after year goes by, the cutting of the timber becomes very remote from tidewater and that cutting goes back further into the mountains and cost of operations becomes much greater; and that the salt water mills about which the large cities on Puget Sound are built and the communities established, and all of the things that go with an organized community, in order that they must be sustained this raw material must be moved to them. Therefore, as that distance becomes greater if the five mile stop is followed out indefinitely, when it gets up to a 200 mile hole or something of that sort the rate is apt to entirely suspend the operation of the logging camps.

Supervisor Cleland: There would be no such haul as that in the state of Washington.

A. I simply mentioned the mileage to illustrate my point.

Supervisor Cleland: Well, would you make it less than that? Would you make it 50 or 100 miles?

[fol. 1364] A. I should say that I have not given the matter sufficient thought to suggest a method, but my suggestion is that the commission give it some thought as to where a break possibly might be advisable.

Supervisor Cleland: What is the maximum distance that would be practicable, or will be practicable to saw logs in the state of Washington?

A. I could not say.

Q. Well, what distance could the timber located from the tidewater mills—the most distance that it could be—or will be hauled?

A. Well, I would say that, generally speaking, whatever the circumstances would be—that whatever circuitous route might be involved from the top of the Cascades mountains to Puget Sound or to Tidewater——

Mr. Henderson: The supervisor wants to know about this—what is the maximum distance?

Sup. Cleland: No—he speculates on what might happen in the future—as to where we should break these steps, and I want to know how far they would have to haul the timber in 40 years. I simply suggested from the top of the mountains in order to cover whatever circuitous route might be involved.

Supervisor Cleland: Have you any suggestions to make as to our adopting a break in those steps?

A. No I have not—I have not had an opportunity to give that a thought, and I wouldn't want to commit myself at this time.

Supervisor Cleland: Well, there are no logging operations at the present time over 70 miles.

A. I couldn't say as to that, but I would say though, that, that [fol. 1365] would be among the longer hauls.

Supervisor Cleland: And would you say that five mile steps should be maintained for 70 miles?

A. Well, again I would like to ask you to excuse me from answering for the reason that I don't feel qualified to suggest that break.

Supervisor Spinning: Isn't that a fact that there is more hauling done by the road—that is, the hauling has increased all the time?

A. Unquestionably that is true. The logging began on Puget Sound many years ago on tidewater and the logger hauls in by boat and as the timber became more remote it became necessary to find other means of transportation of logs to the mills, and that is the reason that the railroads named rates which would move the traffic and get the raw material to these mills, and sustain and maintain them; and when that supply ceases there is going to be trouble in the Pacific Northwest.

Supervisor Spinning: There has been a constant increase in the distance of the haul?

A. Yes.

Mr. Da Ponte: You mean in the volume?

Supervisor Spinning: In quantity.

A. There will be an increase.

Supervisor Spinning: And it is a fact as you go back further into the mountains you get smaller timber—as you go up into the foothills it is more expensive to yard a load and a greater distance from the market?

A. That is quite true.

[fol. 1366] Q. Three elements of expense to be added?

A. Yes.

Q. So that log hauling in this state is going to be one of the most important activities in the state—I consider it so.

Mr. Da Ponte: Isn't there a tendency for the mills to spring up near the logging camps?

A. Not to my knowledge.

Q. But that wouldn't be a remedy for this extraordinary long haul would it?

A. That involves a great many things which I don't believe this commission cares to have me go into at this time because I think we are all conversant with it.

Q. Though if the haul becomes too long for the logs to stand to pay the railroad the reasonable rate, then the only other alternative is for the mills to go to the logs?

A. And then when it becomes impossible to ship to Puget Sound any longer over the common carrier railroad the railroads themselves will accomplish the purpose for which they have been contending vigorously and fighting for 20 years.

Q. What is that?

A. To make people go back and build saw mills on their line.

Q. That is, because the way it is now the railroads being in the logs on these low rates, and the lumber goes out by water?

A. It does not.

Q. You are sure of that?

A. Yes sir.

[fol. 1367] A. Yes sir. My recollection of the forest service figures submitted by Mr. Gray showed that 2½ times the lumber cut gravitated out over common carrier railroad for eastern destinations and was hauled in in the form of logs.

Q. Do you know how much of that lumber that went out on the common carriers came down the sound by raft?

A. By salt water shipment?

Q. Yes.

A. Oh, on that I could not give you a percentage.

Q. No, you have not the remotest idea have you?

A. I think it could be determined definitely.

Q. You couldn't do it at the present time?

A. I can give you my idea of it.

Q. Do you know how many logs move down the sound by water? Can you give us that?

A. No.

Q. Here is another thing. A lot of that lumber that went out over the common carrier railroads was hauled into the mills by their own logging railroads and the railroads never hauled that out at all.

A. The railroads got some haul of lumber that they did not haul any logs for?

Q. Certainly.

A. But they are getting out something all the time in the way of furnishing raw materials——

Q. But isn't it true that they are hauling in many logs to tidewater and the lumber goes out by water?

A. Yes, that is true. They are hauling out in lumber practically all that they haul in in logs, and in addition to that they are hauling out most of the lumber that is sawed out of the logs which [fol. 1368] are produced by the salt water logging camps.

Q. And which they would get regardless of the rate on logs wouldn't they?

A. I don't know as to that.

Mr. Henderson: That completes our testimony for the time.

[fol. 1369] IN THE SUPREME COURT OF THE UNITED STATES,
OCTOBER TERM, 1924

No. 371

NORTHERN PACIFIC RAILWAY COMPANY, GREAT NORTHERN RAILWAY COMPANY, CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY, OREGON-WASHINGTON RAILROAD & NAVIGATION COMPANY, NORTH PACIFIC COAST FREIGHT BUREAU, and S. J. HENRY, as Agent of said North Pacific Coast Freight Bureau, Plaintiffs in Error,

vs.

THE DEPARTMENT OF PUBLIC WORKS OF WASHINGTON; E. V. KUYKENDALL, Director of Public Works; Walter B. Whitcomb, Supervisor of Public Utilities, and Frank R. Spinning, Supervisor of Transportation, Members of said Department of Public Works, Defendants in Error.

STIPULATION

It is hereby stipulated and agreed by and between the parties hereto by their respective attorneys, and the parties and their attor-

neys join in requesting the Clerk of the Court to cause to be printed as rapidly as may be and incorporated with the printed record herein, the additional parts of the record contained in the designation of defendants in error filed August 6th, 1924.

It is further hereby stipulated and agreed that upon notification from the Clerk of the Court of the amount of his estimate of the cost of printing such additional parts of the record, the defendants in error will make a cash deposit with the Clerk to cover such estimate.

It is further hereby stipulated and agreed that the submission of the motion to dismiss the writ of error in this cause, which is now noted for hearing on Monday, October 13th, 1924, shall be postponed until at least thirty (30) days after the completion and filing of the [fol. 1370] entire printed record, and that the Clerk place said motion to dismiss upon the calendar of the court for hearing on the first regular motion day following the expiration of thirty (30) days after the filing of the printed record.

It is further hereby stipulated that in view of the public importance of this case, the parties hereto agree that the same be advanced for hearing at this term of court, provided that, if the case will be set for argument and submission on or about the first day of April, 1925, said date will be satisfactory to all the parties and it need not be further advanced.

Dated this 25 day of September, A. D. 1924.

L. B. da Ponte, Attorneys for Plaintiff in Error, Northern Pacific Railway Company. F. G. Dorety & Thomas Balmer, Attorneys for Plaintiff in Error Great Northern Railway Company. M. Dudley, Attorneys for Plaintiff in Error Chicago, Milwaukee & St. Paul Railway Company. A. C. Spencer and W. A. Robbins, Attorneys for Plaintiff in Error Oregon-Washington Railroad & Navigation Company. L. B. da Ponte & Thos. Balmer, Attorneys for North Pacific Coast Freight Bureau and S. J. Henry, as Agent. John H. Dunbar, Attorney General of the State of Washington; Raymond W. Clifford, Stephen V. Carey, Scott Z. Henderson, Attorneys for Defendants in Error.

[fol. 1371] IN THE SUPREME COURT OF THE UNITED STATES

No. 988

NORTHERN PACIFIC RAILWAY COMPANY, GREAT NORTHERN RAILway Company, Chicago, Milwaukee & St. Paul Railway Company, Oregon-Washington Railroad & Navigation Company, North Pacific Coast Freight Bureau, and S. J. Henry, as Agent of said North Pacific Coast Freight Bureau, Plaintiffs in Error,

v.

THE DEPARTMENT OF PUBLIC WORKS OF WASHINGTON; E. V. KUYkendall, Director of Public Works; Hance H. Cleland, Supervisor of Public Utilities, and Frank R. Spinning, Supervisor of Transportation, Members of said Department of Public Works, Defendants in Error.

Writ of Error to the Supreme Court of the State of Washington

PRÆCIPE OF DEFENDANTS IN ERROR FOR PRINTING RECORD UNDER RULE 10

To the Honorable William R. Stansbury, Clerk of the Supreme Court of the United States, Washington, D. C.:

The defendants in error, Department of Public Works of Washington, E. V. Kuykendall, Director of Public Works, Hance H. Cleland, Supervisor of Public Utilities, and Frank R. Spinning, Supervisor of Transportation, members of said Department of Public Works, still relying upon their motion to dismiss heretofore interposed herein, hereby submit their designation of additional material portions of the record to be printed pursuant to Rule 10, Clause 9 of the Rules [fol. 1372] of this Court.

	Vol.	Page
1. Protest of Association Log Shippers to Tariff No. 29 W. D. P. W. No. 65	1	18
2. Transcript of Testimony taken in Cause No. 5330	1	24
Evidence of Department of Public Works: .		
3. O. O. Calderhead (Tr. of Test.)	3	9–15
Exhibits of Northern Pacific Railway Company:		
4. Exhibit No. 17 A identified by witness Peterson	2	211
5. Exhibit No. 35, page 5 thereof identified by witness Bryan	2	225
6. Exhibit No. 36 identified by witness Peterson	2	226

	Vol.	Page
Exhibits of Great Northern Railway Company:		
7. Exhibit No. 3 identified by Balmer	2	371
8. Exhibit No. 5 identified by Balmer	2	373
9. Exhibit No. 16 identified by Balmer	2	387
10. Exhibit No. 18 identified by Balmer	2	389
11. Exhibit No. 19 identified by Balmer	2	390
12. Exhibit No. 25, pages 67 to 71 inclusive thereof, identified by Balmer	2	402
Exhibits of Chicago, Milwaukee & St. Paul Railway Company:		
13. Exhibit No. 1 identified by Dudley	2	289
14. Exhibit No. 4–1 identified by witness Greengard	2	293
15. Exhibit No. 6 identified by witness Ingalls	2	295
16. Exhibit No. 28 identified by witness Kellogg	2	324
[fol. 1373] Exhibits of Associated Log Shippers:		
17. Entire statement bound with above entitled exhibits and bearing caption "Analysis of Associated Log Shippers Exhibits"	2	196a
18. Exhibit No. 6 identified by witness Gray	2	196a
All the testimony of these witnesses in the record:		
19. Paul Webb	3–7	1014–1043
20. J. E. Frost	3–7	1043–1174
21. Joseph Irving	3–7	1175–1202
22. J. G. Dickson	3–7	1303–1349
23. E. E. Chinn	3–7	1349–1368
24. Portion of the testimony of witness E. C. Richmond omitted from the præcipe of plaintiffs in error, being pages 1278 to 1303 inclusive of the transcript	3–7	1278–1303
25. All of the transcript of testimony on pages 193 to 196 inclusive thereof, commencing with "Mr. Dudley: I assume, Mr. Chairman that at this hearing the evidence introduced by anyone of the railroad companies is available for all, etc." (p. 193) and ending "Mr. da Ponte: There was no talk of deciding the case yet" (p. 196)	3–7	193–196
26. Page 875 of the transcript of testimony in its entirety	3–7	875

[fol. 1374] The following pages from the annual report of the Northern Pacific Railway Company to the Public Service Commission of Washington for the year ended December 31, 1920:

			Vol.	Page
	201		2	245
	303		2	260
304	305		2	261
306	307		2	262
308	309		2	263
508	509		2	280
	303		2	282
304a	305a		2	285
306a	307a		2	284
308a	309a		2	285
	508a		2	288

The following pages from the annual report of the Chicago, Milwaukee & St. Paul Railway Company to the Public Service Commission of Washington for the year ended December 31, 1920:

			Vol.	Page
	201		2	326
	303		2	343
304	305		2	344
306	307		2	345
308	309		2	346
508	509		2	368
304a	305a		2	347
306a	307a		2	348
308a	309a		2	349

The following pages from the annual report of the Great Northern Railway Company to the Public Service Commission of Washington for the year ended December 31, 1920:

			Vol.	Page
	201		2	406
	303		2	428
304	305		2	429
306	307		2	430
308	309		2	431
508	509		2	455
	303a		2	427
304a	305a		2	432
306a	307a		2	433
308a	309a		2	434
508a	509a		2	456

[fol. 1375] The following pages from the annual report of the Oregon-Washington Railroad & Navigation Company to the Public Service Commission of Washington for the year ended December 31, 1920:

			Vol.	Page
	201	.....	2	467
	303	.....	2	488
304	305	.....	2	489
306	307	.....	2	491
308	309	.....	2	493
508	509	.....	2	512
304a	305a	.....	2	490
306a	307a	.....	2	492
308a	309a	.....	2	494

The Department of Public Works of Washington. E. V. Kuykendall, Director of Public Works; Hance H. Cleland, Supervisor of Public Utilities, and Frank R. Spinning, Supervisor of Transportation, Members of said Department of Public Works. John H. Dunbar, Attorney General, State of Washington; Raymond W. Clifford, Stephen V. Carey, Scott Z. Henderson, Their Attorneys.

[fol. 1376] Service of the foregoing designation of parts of the record to be printed, and the receipt of a true copy thereof, is hereby acknowledged by the Plaintiffs in Error.

Seattle, Washington, July 31st, 1924.

L. B. da Ponte, Attorneys for Plaintiff in Error Northern Pacific Railway Company. F. G. Dorety & Thomas Balmer, Attorneys for Plaintiff in Error Great Northern Railway Company. F. M. Dudley, Attorneys for Plaintiff in Error, Chicago, Milwaukee & St. Paul Ry. Co. L. B. da Ponte and Thos. Balmer, Attorneys for Plaintiff in Error, S. J. Henry, as Agent.

Portland, Oregon, August 1st, 1924.

A. C. Spencer, W. A. Robbins, Attorneys for Plaintiff in Error Oregon-Washington R. R. & Nav. Company.

[fol. 1377] Endorsed: File No. 30,298. Supreme Court U. S., October Term, 1924. Term No. 371. Northern Pacific Railway Company et al., Plaintiffs in Error, vs. Department of Public Works of Washington et al. Stipulation for printing additional portions of record. Filed October 1, 1924.

[fol. 225-5] Northern Pacific Railway Company, Valuation Department

Summary Sheet

Estimated Cost of That Portion of the Northern Pacific Railway's Main and Branch Lines West of Ellensburg, Washington, Including All Tracks and Facilities Used for Transportation Purposes, Comprising the Seattle, Puget Sound and Tacoma Divisions in the State of Washington.

Exclusive of Land

Acct.		Cost
#3.	Grading	$38,628,274.00
5.	Tunnels and subways	4,431,506.00
6.	Bridges, trestles and culverts	7,358,511.00
8.	Ties	2,761,205.00
9.	Rails	8,670,530.00
10.	Other track material 10-A	698,658.00
	10-B	2,282,039.00
11.	Ballast	3,464,317.00
12.	Track laying and surfacing	4,493,540.00
13.	Right of way fences	290,510.00
14.	Snow and sand fences and snowsheds	17,920.00
15.	Crossings and signs	1,111,051.00
16.	Station and office buildings	2,597,621.00
17.	Roadway buildings	172,507.00
18.	Water stations	340,031.00
19.	Fuel stations	195,001.00
20.	Shop and engine houses	1,677,274.00
23.	Wharves and docks	1,279,943.00
24.	Coal and ore wharves	117,151.00
26.	Telegraph and telephone lines	448,936.00
27.	Signals and Interlockers	587,844.00
31.	Power transmission systems	15,375.00
32.	Power distribution systems	33,776.00
33.	Power line poles and fixtures	5,032.00
34.	Underground conduits	1,853.00
35.	Miscellaneous structures	2,336.00
36.	Paving	6,025.00
37.	Roadway machines	103,932.00
38.	Roadway small tools	161,506.00

Acct.		Cost	
39.	Assessments for public improvements	1,505,332.00	
44.	Shop machinery	823,928.00	
45.	Power plant machinery	133,350.00	
46.	Power sub-station apparatus	1,597.00	
			$84,418,411.00
	Engineering 5%		4,220,923.00
			88,639,334.00
	General expenses 4%		3,545,577.00
			92,184,911.00
	Contingencies 5%		4,609,246.00
			96,794,157.00
	Interest 6% (See detail sheets)		8,734,122.00
			$105,528,279.00
Acct.	#51—Steam Locomotives		4,511,835.00
	53—Freight train cars		4,129,062.00
	54—Passenger " "		1,125,863.00
	57—Work equipment		720,933.00
	Interest 6% for 6 months on equipment		314,631.00
	Total Lines West of Ellensburg		$116,330,603.00

Office of Valuation Engineer, St. Paul, Minnesota, July 7th, 1921.
Revised Aug. 2, 1921.

[fol. 226] N. P. Exhibit No. 36

Northern Pacific Railway Company

Statement Showing Washington Intrastate Traffic on Logs, Year 1919 and December, 1920, and Interstate Traffic for the Year 1919, January to August, 1920, and September to December, 1920, also Revenue Ton-miles for Years 1919 and 1920

Logs, Washington, Intrastate

	Year 1919	December, 1920
Number of Loaded Cars	90,883	4,725
Number of Loaded Car Miles	2,747,496	140,980
Total Net Tons	3,117,832	162,096
Total Revenue	$1,066,291.44	$69,663.10

Logs, Washington, Interstate

	Year 1919	January to August, 1920	September to December, 1920
Number of Loaded Cars.....	122	34	3
Number of Loaded Car Miles.	2,565	960	57
Total Net Tons.....	4,363	970	130
Total Revenue	$714.57	$338.41	$19.41

Revenue Ton-miles, Washington, Intrastate & Interstate

	Year 1919	Year 1920
Intrastate	413,321,522	452,784,759
Interstate	1,204,563,530	1,186,576,969
Total	1,617,885,052	1,639,361,728

Office of Auditor Freight Receipts, St. Paul, Minn., May 12th, 1921.

AFR-S-1578.

[fol. 324]

C., M. & St. P. Ry. Co.

DEFENDANTS' EXHIBIT 28

Statement Showing Distance Rates on Logs, in Dollars and Cents per 1,000 Feet Compared with Distance Rates on Slabwood, Fuelwood,

	Logs on ordinary flat cars									Lumber						
	Between all stations on C., M. & St. P. Ry., Bellingham, Wn., and north thereof		Between all stations on C., M. & St. P. Ry., National Park Branch Hillsdale, Wn., and south thereof		Between all stations on C., M. & St. P. Ry. Coast Division, Ellensburg, Wn., and west thereof except National Park Branch		(4) Slabwood between all stations on C., M. & St. P. Ry. in Washington			Between all stations on C., M. & St. P. Ry., Coast Division, Cedar Falls, and West			Between all stations in Washington on C., M. & St. P. Ry. east of Cedar Falls, also between such stations and stations — Cedar Falls and west			Sam C. in
Distance, miles	Per 1,000 feet unit of (1) 8,210 lbs.	Total car earnings (5), 7,826 feet average	Per 1,000 feet unit of (1) 8,210 lbs.	Total car earnings (5), 7,826 feet average	Per 1,000 feet unit (1) of 8,210 lbs.	Total car earnings (5), 7,826 feet average	Per unit of (2) (3) 8,210 lbs.	Rate in cents per cord	Total car earnings based on 40 ft. open car 18-cord gap	(2) unit of 8,210 lbs.	Rate in cents per 100 lbs.	Total car earnings based on 40-ft. box car, min. wt. 55,000 lbs.	(2) unit of 8,210 lbs.	Rate in cents per 100 lbs.	Total car earnings based on 40-ft. box car, min. wt. 55,000 lbs.	(2) 8,21
	(a)		(b)		(c)			(e)			(h)			(i)		
5	$1.95½	$15.30	$1.25	$9.76	$1.56½	$12.25	$2.21	115	$20.70	$2.46	3	$16.65	$2.46	3	$16.65	$
10	1.95½	15.30	1.40½	11.09	1.56½	12.25	2.21	115	20.70	4.11	5	27.75	4.11	5	27.75	
15	2.34½	18.35	1.56½	12.25	1.75½	13.73	2.40	125	22.50	4.11	5	27.75	5.34	6½	36.08	
20	2.34½	18.35	1.72	13.46	2.11½	16.55	2.40	125	22.50	4.11	5	27.75	5.34	6½	36.08	
25	2.34½	18.35	1.87½	18.66	2.19	17.14	2.59	135	24.30	4.52	5½	30.53	6.57	8	44.40	
30	2.34½	18.35	1.95½	15.30	2.27	17.77	2.59	135	24.30	5.34	6½	36.08	7.80	9½	52.73	
35	2.34½	18.35	2.03	15.89	2.34½	18.35	2.78	145	26.10	5.34	6½	36.08	7.80	9½	52.73	
40	2.34½	18.35	2.03	15.89	2.42½	18.98	2.78	145	26.10	5.34	6½	36.08	9.45	11½	63.83	
45	2.34½	18.35	2.11½	16.55	2.50	19.57	2.98	155	27.90	5.34	6½	36.08	9.45	11½	63.83	
50	2.34½	18.35	2.11½	16.55	2.58	20.19	2.98	155	27.90	5.75	7	38.85	10.26	12½	69.38	

(a) Item 350-A, Sup. 4, C., M. & St. P. Ry. G. F. D. No. 13825-A, I. C. C. No. B-3804, W. P. S. C. No. 328.
(b) Item 345, Page 10, C., M. & St. P. Ry. G. F. D. No. 13825-A, I. C. C. No. B-3804, W. P. S. C. No. 328.
(c) Item 300-B, Sup. 4, C., M. & St. P. Ry. G. F. D. No. 13825-A, I. C. C. No. B-3804, W. P. S. C. No. 328.
(d) Item 3500, page 230, N. P. O. F. S., Tariff No. 1, S. J. Henry, Agent, I. C. C. No. 9, W. P. S. C. No. 1.
(e) Schedule 1, N. P. C. F. B., Tariff No. 15-B, S. J. Henry, Agent, I. C. C. No. 59, W. D. P. W. No. 56, also C., M. & St. P. Ry. G. F. D. No. 12650-C, I. C. C. No. B-3924, W. P. S. C. No. 303.
(f) Schedule 4, page 95, N. P. C. F. B., Tariff No. 11, S. J. Henry, Agent, I. C. C. No. 48, W. D. P. W. No. 45.
(g) Schedule 3, page 94, N. P. C. F. B. Tariff No. 11, S. J. Henry, Agent, I. C. C. No. 48, W. D. P. W. No. 45.
(h) Item 350, C., M. & St. P. Ry. G. F. D. No. 11890-D, I. C. C. No. B-4360, W. P. S. C. No. 399.
(i) Column No. 1 rates, Item 375, C., M. & St. P. Ry. G. F. D. No. 11890-D, I. C. C. No. B-4360, W. P. S. C. No. 399.
(j) N. P. C. F. B. Tariff No. 25-B, S. J. Henry Agent, I. C. C. No. 53, W. P. S. C. No. 50, also C., M. & St. P. Ry. G. F. D. No. 12650-C, I. C. C. No. B-3924, W. B. S. C. No. 303.
*Item No. 130, page 44, S. J. Henry's Tariff No. 11, W. D. P. W. No. 45 provides that minimum charge for a line haul carload shipment shall be $15.00.

(1) Unit of 8,210 lbs. n
P. W. Cause No. 5159.
(2) Unit of 8,210 lbs. se
(3) Average weight of
Slabwood moving during D
Docket No. 1251.
(4) Scale of rates show
Docket No. 1251 and order
(5) 7,826 feet average

DEFENDANTS' EXHIBIT 28

,000 Feet Compared with Distance Rates on Slabwood, Fuelwood, etc., Lumber, Sand, Brick, Potatoes, and Onions in State of Washington

Lumber									Brick between all stations on C., M. & St. P. Ry., Cedar Falls and west thereof, except stations on Olympic Division			Potatoes and onions					
Between all stations on C., M. & St. P. Ry., Coast Division, Cedar Falls, and West			Between all stations in Washington on C., M. & St. P. Ry. east of Cedar Falls, also between such stations and stations — Cedar Falls and west			Sand between all stationse on C., M. & St. P. Ry. in Washington						Between all stations on C., M. & St. P. Ry. in Washington on Coast Division west of Earlington			Between all stations on C., M. & St. P. Ry. in Washington east of Earlington, also between stations east and west of Earlington		
(2) unit of 8,210 lbs.	Rate in cents per 100 lbs.	Total car earnings based on 40-ft. box car, min. wt. 55,000 lbs.	(2) unit of 8,210 lbs.	Rate in cents per 100 lbs.	Total car earnings based on 40-ft. box car, min. wt. 55,000 lbs.	(2) unit of 8,210 lbs.	S. L. haul rate in cents per 100 lbs.	Total car earnings based on tariff, min. wt. 60,000 lbs.	(2) unit of 8,210 lbs.	Rate in cents per 100 lbs.	Total car earnings based on tariff, min. wt. 50,000 lbs.	(2) unit of 8,210 lbs.	Rate in cents per 100 lbs.	Total car earnings based on tariff, min. wt. 36,000 lbs.	(2) unit of 8,210 lbs.	Rate in cents per 100 lbs.	Total car earnings based on tariff, min. wt. 36,000 lbs.
	(h)			(i)			(j)			(d)			(f)			(g)	
$2.46	3	$16.65	$2.46	3	$16.65	$2.46	3	$18.00	$4.11	5	$25.00	$3.28	4	$14.40	$4.11	5	$18.00
4.11	5	27.75	4.11	5	27.75	2.46	3	18.00	5.34	6½	32.50	4.11	5	15.80	4.11	5	18.00
4.11	5	27.75	5.34	6½	36.08	2.46	3	18.00	5.34	6½	32.50	4.52	5½	19.80	6.57	8	28.80
4.11	5	27.75	5.34	6½	36.08	2.46	3	18.00	5.75	7	35.00	5.34	6½	23.40	7.39	9	32.40
4.52	5½	30.53	6.57	8	44.40	3.28	4	24.00	5.75	7	35.00	5.75	7	25.20	7.80	9½	34.20
5.34	6½	36.08	7.80	9½	52.73	3.29	4	24.00	6.16	7½	37.50	6.57	8	28.80	9.45	11½	41.40
5.34	6½	36.08	7.80	9½	52.73	3.69	4½	27.00	6.16	7½	37.50	6.57	8	28.80	9.85	12	43.20
5.34	6½	36.08	9.45	11½	63.83	3.69	4½	27.00	6.57	8	40.00	7.39	9	32.40	10.26	12½	45.00
5.34	6½	36.08	9.45	11½	63.83	4.11	5	30.00	6.57	8	40.00	7.80	9½	34.20	10.26	12½	45.00
5.75	7	38.85	10.26	12½	69.38	4.11	5	30.00	7.59	9	45.00	8.21	10	36.00	11.90	14½	52.20

(1) Unit of 8,210 lbs. arrived at by taking 1,000 ft. logs at average weight of 8.21 lbs. per foot board measure. C., M. & St. P. Ry. Exhibit No. 9, W. D. P. W. Cause No. 5159.

(2) Unit of 8,210 lbs. selected for purpose of comparison with revenue on logs for which weight was arrived at as per (1) footnote above.

Ry. G. F. D. No. 12650-C, I. C. (3) Average weight of 4,276 lbs. for one cord slabwood arrived at by figuring the actual weights of 39 cars of Forest Wood. Dry Slabwood and Green Slabwood moving during December, 1920, in State of Washington as per C., M. & St. P. Ry. Exhibit No. 8 in W. D. P. W. Cause No. 5150, I. C. C., I. & S. Docket No. 1251.

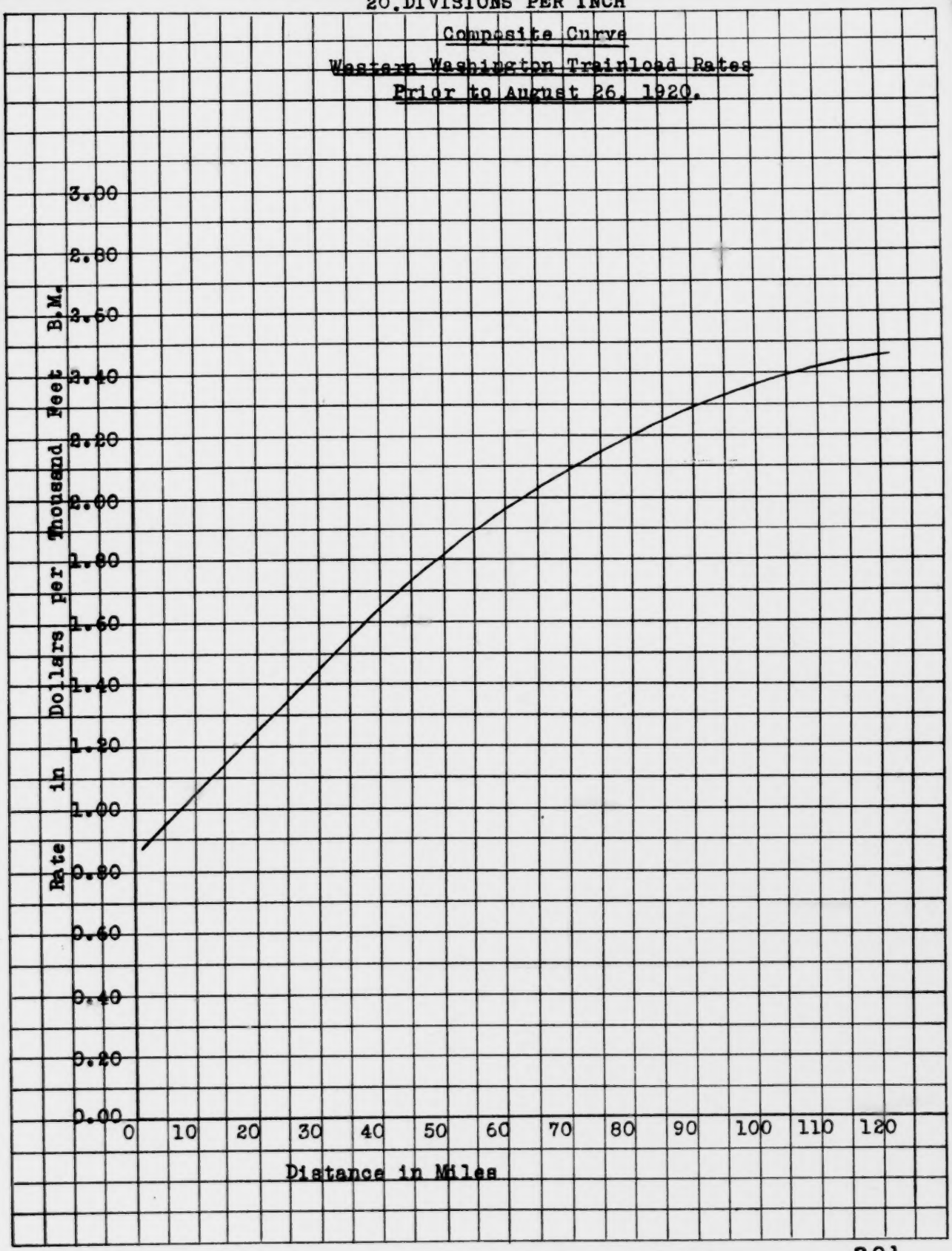
(4) Scale of rates shown as applicable on Slabwood is basis established under order dated March 26, 1921, of Interstate Commerce Commission in I. & S. Docket No. 1251 and order dated April 18, 1921, of Department of Public Works of State of Washington in Cause No. 5150.

(5) 7,826 feet average arrived at by taking average of 147 cars actually weighed as per C., M. & St. P. Ry. Exhibit No. 9, W. D. P. W. Cause No. 5159.

o. 12650-C, I. C. C. No. B-3924,

ad shipment shall be $15.00.

ASSOCIATED LOG SHIPPERS, EXHIBIT No. 6
20.DIVISIONS PER INCH



(2)

Office Supreme Court, U. S.
FILED
SEP 27 1924
WM. R. STANSBURY
CLERK

IN THE

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1924.

No. 371.

NORTHERN PACIFIC RAILWAY COMPANY, et al.,
Plaintiffs in Error,

vs.

THE DEPARTMENT OF PUBLIC WORKS OF WASHINGTON, et al.

BRIEF FOR PLAINTIFFS IN ERROR ON MOTION TO DISMISS THE WRIT OF ERROR.

(1) The first ground assigned for dismissal is that the judgment of the Supreme Court of the State of Washington (if reviewable by this court at all) must be brought here by certiorari instead of writ of error.

This question was settled by *Bluefield W. W. & Imp. Co. v. P. S. Commission*, 262 U. S. 679, and *Missouri ex rel. S. W. Bell Tel. Co. v. P. S. Com-*

mission, 262 U. S. 276. Those cases were exactly like this; viz., there was an order of a state commission fixing what it found to be reasonable and just rates; the legislature in all the cases having enacted that rates must be reasonable and undiscriminatory and then told the commission to fix the exact rates applying these general rules. The Bluefield case holds that the order of the commission under such authority is a legislative act—that is a law; consequently that an attack on the validity of the order (as on the ground of its confiscatory character), is an attack on the validity of a law; and that where the highest court of a state overrules such contention writ of error is the proper review.

Under Sec. 10389 Remington's Compiled Statutes of Washington, 1922, the state commission is given legislative authority, either upon its own motion or upon complaint, to determine the charges that may be demanded and collected by every common carrier for transportation within the state, and to determine the regulations and practices of such carrier. In Sec. 10345, the legislature said that all such charges should be just, fair, reasonable and sufficient. In other sections it prohibited discrimination. But instead of trying to fix directly the charges of such carriers it delegated to the commission its authority in that respect.

Sec. 10428 Remington provides for review of the commission's orders in the Superior Court, and Sec. 10430 provides an appeal thence to the Supreme Court. This case is like the two cases we

have cited; as in those cases the judgment complained of here is that of the state court in a direct proceeding to review the commission's order.

(2) The second and third grounds of the motion to dismiss may be treated together. The second is that no federal question is involved; and the third, that if one appears to be involved it is only colorable and not real and substantial.

We shall try to show, in as brief a manner as possible and without argument, what the issues in the case are.

December 30, 1920, the Public Service Commission (now called Department of Public Works) filed a complaint of its own motion against the plaintiffs in error, the Northern Pacific Railway Company, the Great Northern Railway Company, the Chicago, Milwaukee & St. Paul Railway Company, the Oregon-Washington Railroad & Navigation Company, and others, the railway companies being the four principal companies doing business in Washington. This complaint alleged that the log rates in Washington were "excessive, unreasonable, discriminatory and preferential." The hearing resulted in findings of fact and an order fixing for twelve months the carriers' rates for transporting logs. This finding and order is printed as Appendix 1 to the "Motion to Dismiss."

The order made a reduction of about twenty-five per cent in the existing log rates applicable to an enormous business,—about 250,000 carloads per annum.

In Washington logs are commonly hauled by rail from the forests to the sawmills for manufacture. The forests are reached largely by logging railroad branches, on which there is no, or little, other traffic. The logs are hauled on special cars different from other cars and always, or mostly, in trains unmixed with other freight. Generally the log trains move partly over a logging branch and partly over some main line of the carrier, over which also move large volumes of other traffic, passenger and freight.

It thus appears that the log business is in a class by itself and that in every essential respect it is very dissimilar to other traffic.

The Public Service Commission proceeded on the theory that the carriers were entitled to earn from the transportation of logs a just return on the value of their property assignable to that transportation.

There was a long hearing and much testimony on the value of this property and on the cost of transporting logs. In finding XV the commission assumed that $300,000,000 would cover the value of all the property of the four carriers in any way used or useful in connection with log traffic; it considered that not more than 75 per cent of such value or $225,000,000 is assignable to freight; it said that gross ton miles of logs hauled by the four carriers within the state were about 4.97 per cent of the total gross ton miles of all revenue freight; and from that fact made the deduction that 5 per cent of the value of the carriers'

property assigned to freight service was to be attributed to carriage of logs.

The commission's method of figuring operating costs is shown in finding XIII. The aggregate expense for the four lines for log transportation the commission found to be $1,923,198. To get this figure it took the "cost per 1,000 gross ton miles of handling all freight upon the combined systems of the four principal carriers." That is, the commission took as the cost of log transportation in Washington the average cost as reported by the carriers of transporting freight of all descriptions on their systems, lying in many states and subject to widely varying conditions. The assumption, that the cost of hauling sawlogs in Washington is the same as the average system cost of transporting all freight on the four railroads, is a violent assumption, which there is no evidence to sustain. The theory is an invention of the commission.

The commission disallowed the carriers federal income taxes. It is difficult to conceive why federal taxes were excluded from operating cost.

The carriers attempted to prove in several ways the value of their property properly assignable to log transportation as carried on in Washington and the costs properly chargeable to that transportation, showing such cost separately for main and branch lines [Transcript Exhibit 17, Witness Peterson]. On the carriers' showing the commission's tariff was clearly confiscatory, yielding no net revenue whatsoever.

The carriers in their assignments of error here as well as in the state court said that the tariff fixed by the commission was confiscatory, and seasonably and in proper manner they have specified objections to the valuation of property fixed by the commission as well as to the commission's determination of expense chargeable to the log traffic. Every contention that a commission's order, or an act of the legislature fixing a tariff, operates to confiscate property, raises questions which must ultimately be determined as facts. First, what is the fair value of the property on which a return is to be allowed, and secondly what is the cost of doing the business. In this case these questions were fully and extensively litigated before the commission and in various essential respects the commission's rulings are properly charged to be erroneous.

The motion does not suggest that assignments of error are insufficient or that the questions involved were not pressed on the state court. It is proper, however, to say that among other errors insisted on in the state court and reassigned here are the following:

> The Department adopted a wrong theory for determining cost of the log traffic.
>
> The Department also determined on a wrong basis the value of the carriers' property devoted to log traffic.
>
> The Department apportioned taxes to log traffic on a wrong basis.
>
> The Department's schedule of log rates is confiscatory and takes appellants' prop-

erty without due process of law, contrary to the Fourteenth Amendment.

Tariff No. 29, submitted by the carriers, is a just and reasonable schedule of rates. Its cancellation takes appellants' property without due process of law, in violation of the Fourteenth Amendment.

The Department's finding that existing rates are discriminatory (if material) is contrary to the evidence.

The Department's order discriminates against interstate commerce.

The rates named in tariff 29 are not in excess of the rates the carriers are entitled to.

It is therefore too obvious for discussion that federal questions are involved in the record and that to say the least they are not far-fetched or frivolous. The motion to dismiss must therefore be denied.

CHARLES W. BUNN,
for Plaintiffs in Error.

Office Supreme Court, U. S.
FILED
FEB 11 1925
WM. R. STANSBURY
CLERK

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1924.

No. 371.

NORTHERN PACIFIC RAILWAY COMPANY, and others,
Plaintiffs in Error,

vs.

THE DEPARTMENT OF PUBLIC WORKS OF WASHINGTON, and others.

BRIEF ON BEHALF OF PLAINTIFFS IN ERROR

CHARLES W. BUNN.

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SUPREME COURT OF THE UNITED STATES

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No. 371.

NORTHERN PACIFIC RAILWAY COMPANY, and others,
Plaintiffs in Error,

vs.

THE DEPARTMENT OF PUBLIC WORKS OF WASHINGTON, and others.

BRIEF ON BEHALF OF PLAINTIFFS IN ERROR

QUESTION IN CASE

This is a writ of error to the Supreme Court of Washington to review a final judgment which affirmed the validity of a tariff for transportation of sawlogs on the railways within the State made by the Department of Public Works. The Department is a commission formerly called "Public Service Commission." See Title LXXII Remington's Compiled Statutes. Pursuant to the law of Washington the order of the Department was re-

viewed in the Superior Court of Thurston County, where judgment was rendered affirming the order, which judgment was affirmed by the Supreme Court of Washington, whose judgment is under review here upon writ of error.

The commencement of the proceeding was a complaint by the Public Service Commission December 28, 1920, of its own motion, notifying the carriers of a hearing before itself on the unreasonable and discriminatory character of the log rates then in force. A long hearing ensued commencing April 11, 1921, on which a large amount of testimony was taken and is preserved in the record. The carriers contended, and offered testimony to support the contention, that existing log rates were uncompensatory. On invitation of the Commission the carriers filed a proposed tariff, "Tariff 29" (Trans. opposite p. 12) which named higher rates than those in effect and abolished alleged discriminations. This tariff was suspended by the Commission and never became effective. The evidence of the carriers was directed to show that existing rates or any rates below the rates of Tariff 29 were uncompensatory. The decision of the Department dated February 1, 1922, is comprised in its "Findings of Fact and Order", Trans. p. 15 to 31. This is the order here complained of. It directly reduced existing rates approximately twenty per cent on the average. It also provided that minimum loads should be determined by the average of all cars tendered at one time instead of separately for each car and by this new minimum

rule made a considerable indirect reduction in the carriers' revenues. A still further reduction results from that feature of the order providing that cars not equipped with patent bunks and stakes shall be rated for minimum load at 500 feet less, and shall be transported at a rate fifty cents per car less, than those so equipped. See findings XXIII, XXV (Trans. p. 28, 29).

The order also canceled Tariff 29 (Trans. p. 29).

In review proceedings instituted in the Superior Court Thurston County the carriers at the outset asserted that the order of the Department violated the Fourteenth Amendment by taking their property without due process. This was the contention principally pressed upon the state courts. The Superior Court overruled it and its action was affirmed by the Supreme Court of the State. This error was properly assigned in the removal to this court (Trans. p. 65-69). Assignment IX alleges error, in that the order prescribes a schedule of rates which does not pay the cost of the traffic to which it applies plus a fair return, and assignment XI alleges error in cancellation of Tariff 29, which named rates no higher than the plaintiffs in error were entitled to. On both grounds the plaintiffs in error say that their property is taken by the order of the Department without due process of law; that it is taken both by the reduction and by denial of the increases of Tariff 29.

The proceeding was commenced before the Public Service Commission December 28, 1920, and the

order complained of was made on the first day of February, 1922. On the 25th of August, 1920, about four months before this proceeding, the Public Service Commission of Washington made an order conforming local rates within the state to the increases ordered by the Interstate Commerce Commission in Ex Parte 74, which went into effect August 26, 1920. The order in Ex Parte 74 and the order of the Washington Commission of August 25, 1920, as well as similar advances of local rates in other states, rested on the admitted increases in wages and other costs affecting carriers following the war. While it is true that the Washington Commission in its order of August 25 said that in their opinion the present rates on logs were illogically constructed and not in harmony as between different communities, and suggested to the carriers for this reason their readjustment, the twenty-five per cent increase of Ex Parte 74 was extended by the Washington Commission to logs and other freight moving within the state. The criticism then made by the Commission on the log rates was to their discriminatory character and there was no suggestion for their general reduction. The order here is hardly consistent with the country-wide determination shortly before reached by the federal government and by the states, that an advance in freight rates of at least twenty-five per cent was necessary. The order complained of put the log rates back to substantially what they were before Ex Parte 74, leaving untouched other rates local and interstate made in 1920 under Ex Parte 74 and the state commission's order of August 25.

THE RATES FIXED WERE CONFISCATORY.

That the log rates lacked uniformity is not surprising when their history is considered, but that is no justification for their general reduction. When the Northern Pacific was built to the Coast there was no logging and little of any other business. It had little or no east bound traffic. It had timber land to sell. Rates were then a matter of contract. An extremely low rate was necessary to start the industry and to enable the Northern Pacific to sell timber land. Rates were made on logs as part consideration for sales of standing timber. This practice started about 1888 (Trans. p. 483). It influenced all subsequent rates on all the railroads. Rates based on this practice were bound to lack uniformity. They remained, however, up to federal control when they were raised uniformly twenty-five per cent by General Order No. 28, and another twenty-five per cent by Ex Parte 74. At the time of this hearing they were substantially one hundred fifty-six per cent of the rates in force before federal control. See witnesses Capron, Trans. pp. 482-3, Albee, Trans. pp. 558-9, Plummer, Trans. p. 693, and Department's findings, Trans. p. 20.

COMPARISONS OF RATES.

The following comparisons were shown between log rates and other rates: Mr. Capron in N. P. exhibit 9 (Trans. opp. p. 98) compares Washing-

ton rates on logs with as low rates as he could find on the Northern Pacific—under which traffic in large volume moved—rates on common brick, cement, limestone fertilizer, grain, lumber, sand-gravel, coal, junk, and ores. The log rates do not exceed fifty per cent of those upon lumber, sand-gravel, and ores, on which commodities rates are lower than on the others named. Revenue in mills per ton mile for Washington logs compared with lumber, stone, sand-gravel, and junk moving in the same territory as shown in this exhibit compare as follows:

Distance	Logs	Limestone fertilizer	Sand-gravel	Junk
Miles	Mills	Mills	Mills	Mills
5	76	160	120	300
10	38	100	60	150
15	31	67	40	100
20	25	55	30	75
25	21	44	32	75
30	18	43	27	63
35	16	37	26	57
50	12	30	22	62
75	10	24	19	40
100	8	23	15	31
150	6	19	13	20

In these figures the distance tariff on logs is used, but most of them moved under commodity rates substantially lower.

Witness Mount (Trans. pp. 459, 463) said that the rates then in effect on logs in Washington were

the lowest rates provided for that transportation anywhere on the continent of North America. He said also that they were materially lower than rates for other low grade freight, which he showed in exhibit No. 6 opposite Trans. p. 312. This exhibit compares rates and revenue for logs in carloads from points in Washington where there was a regular movement during the years 1919 and 1920 with similar rates and revenue for sand-gravel, brick and scrap iron from Seattle, Washington, and cement from Concrete, Washington, to equi-distant points. In part this comparison is as follows:

	Car earnings	Distance
Logs	$15.20	9.4 miles
Sand	24.00	9.4 "
Brick	52.00	9.4 "
Scrap iron	52.00	9.4 "
Cement	64.00	9.4 "
Logs	17.60	28.5 "
Sand	32.00	28.4 "
Brick	52.00	28.4 "
Scrap iron	64.00	28.4 "
Cement	72.00	28.4 "

In a recent decision of the Interstate Commerce Commission, in which the Department of Public Works participated, rates on slab wood, almost a waste product of logs, were established yielding forty per cent greater revenue than existing log rates (Trans. p. 461).

Witness Mount cited a number of I. C. C. cases in which about the same or higher rates on logs were

approved than are proposed by the carriers in tariff No. 29, viz.:

In 30 I. C. C. page 36, a rate of $2.70 per 1,000 feet for a distance of ten miles or less.

In 41 I. C. C. 431, $2.40 for 14 miles.

In the *Chattanooga log case,* 35 I. C. C. 163, rates on logs about equal to rates on brick, sand and gravel, fertilizer, grain, cement and scrap iron were approved. The comparisons made by the Commission were as follows:

Commodity	Revenue per car mile
Common brick	25.11¢
Sand and gravel	31.39
Fertilizer	23.25
Grain	27.90
Cement	20.46
Scrap iron	23.25
Logs	22.93

(Trans. pp. 463-4).

The *Chattanooga case* was approved in *Farris Lumber Co. v. Director General,* 68 I. C. C. 181, where a schedule of rates was approved considerably higher than Tariff 29 (see Trans. pp. 461-465).

Before stating the other evidence it is important to note that the contest before the Department was directed largely to transportation on the Northern Pacific. This was because the Northern Pacific is the oldest line in the state with the densest and largest traffic, consequently the lowest operating cost. The expert of the Commission, Mr. Calderhead, testified that the Northern Pacific would show a reasonable return on a lower scale of rates than the other roads (Trans. pp. 753-4). Naturally the main effort therefore was to show what rates could lawfully be imposed on the Northern Pacific. Witness Gray, the expert of the Associated Loggers (the shippers), determined that freight operating costs per unit were lower on the Northern Pacific than on any of the other roads. He gave operating costs in Washington per 1,000 gross ton miles of freight, Northern Pacific $5.508, Great Northern $6.970, Chicago, Milwaukee & St. Paul $6.105, Oregon-Washington $6.609 (Associated Loggers' Revised exhibit 4, Trans. p. 88). It was recognized on all hands that rates unreasonably low as applied to the Northern Pacific would be still less remunerative to the other roads. This explains why an apparent disproportionate part of the evidence related to the Northern Pacific.

On all the roads the log traffic in Washington is confined to the district west of the Cascade mountains. The greater part of it originates and is handled on branch lines (Department finding, Trans. p. 24). The branch lines were largely built to reach the logs; their grades are unusually

steep and their traffic light compared with main line (Trans. p. 561). These and the other general facts, largely stated under the next heading, "Facts as to the Northern Pacific", are applicable to all the plaintiffs in error. In view of the trial having been focused on the Northern Pacific, which made the best case of all the carriers for rate reduction, the statements under the next heading are applicable to all the carriers.

FACTS AS TO THE NORTHERN PACIFIC.

1. *Operating expenses.*

Logs in Washington are hauled on an average 31.2 miles as compared with 99 miles the average haul of all other local traffic within the state, and all traffic in the state counting both local and interstate 142.24 miles, and on the Northern Pacific system as a whole 334 miles (Trans. pp. 106, 532, 537, 717).

The log cars are special equipment not used in other transportation and are always hauled one way empty, so that their mileage is 50% empty, compared with all Washington traffic (including logs) 35% empty (Trans. pp. 532, 554).

Log cars are subjected to extraordinary breakage and the cost of repairs is about three times that of other cars (Trans. p. 573).

The Department in finding XI says that log cars are under load a greater portion of the time than other classes of equipment having the same average length of haul, which can hardly be the case as log cars never can be loaded both ways and other equipment can be. It was shown that log

cars have very much less movement per diem than other cars (Trans. pp. 567, 400).

While logs coming into Seattle and Tacoma use the terminals in those cities to a less extent than most other traffic and in a different way, that is the only respect in which log transportation is cheaper than other transportation; and in the proper connection we shall endeavor to make more than due allowance on this score.

The carriers made the best proof of which the case admitted of the cost of transporting logs in Washington. They presented careful and well considered proofs which were in no wise questioned or contradicted. The log movement being west of the Cascade mountains the carriers' studies for the most part were confined to that part of their lines on which the logs actually moved, the Northern Pacific lines being shown in red on map opposite page 12. To the best of their ability they proved the cost of transportation.

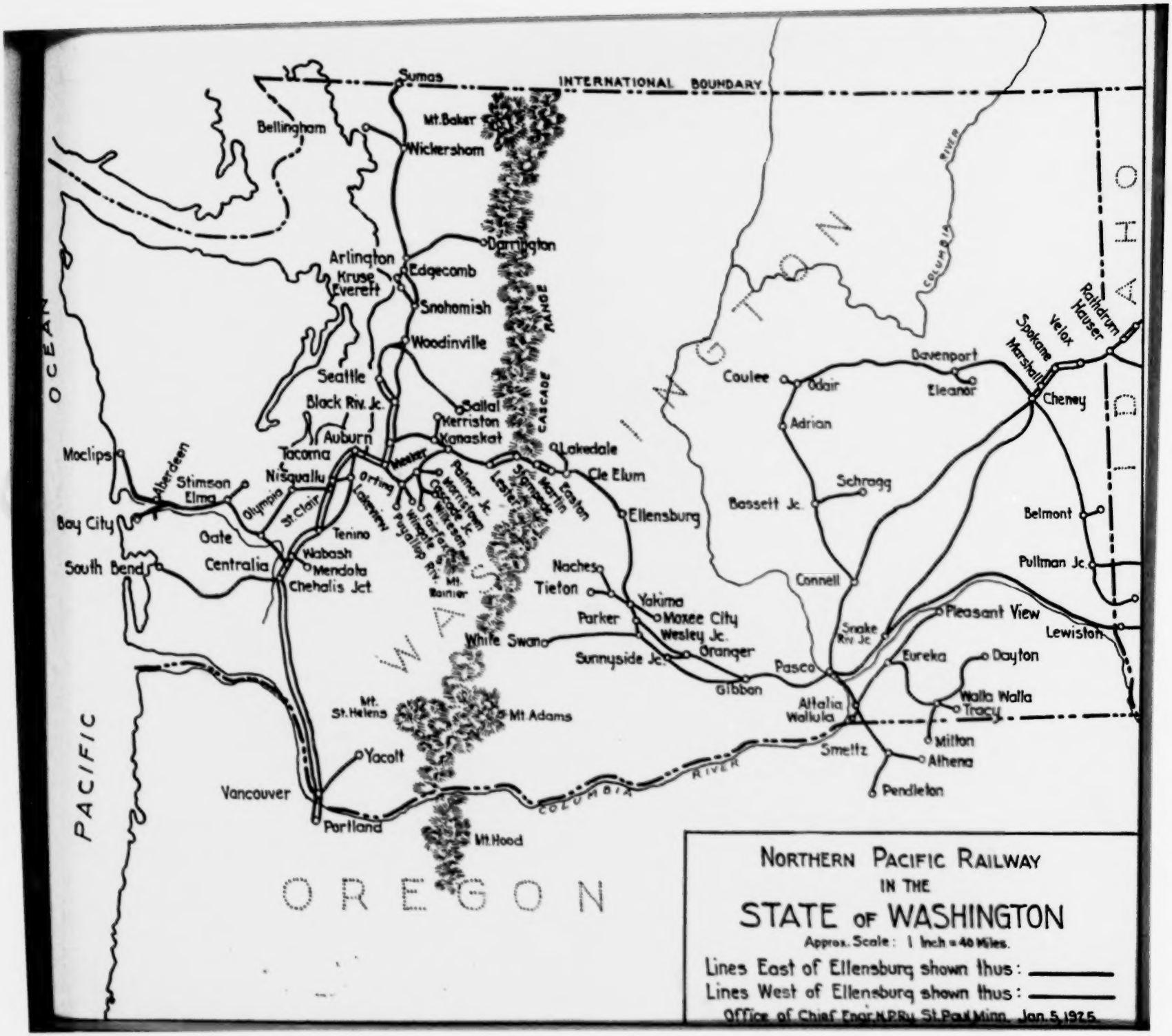
As the court well knows, certain classes of expenses, typically maintenance of property and general expense, are common to both freight and passenger service, and to determine the cost of either, such expenses have to be divided approximately, using some arbitrary basis.

The Interstate Commerce Commission by its order dated December 1, 1919, effective January 1, 1920, laid down rules for dividing operating expenses between freight service and passenger service. The carriers based computations both on these rules and on a long continued practice of the

Northern Pacific, Great Northern, and some other railway companies which attributes to freight in all cases less expense than the Commerce Commission's method (Trans. p. 524).

The carriers are required by the Commerce Commission to report a separation of their *annual* expenses and the Northern Pacific practice has been to divide on the Commission's basis only the annual results. Hence such division by months was not available. Therefore witness Peterson being requested by the Department to furnish a statement for selected months (Trans. p. 519), prepared a special showing for September, October and November, 1920, those being the months of largest freight movement in which expenses would be lowest. For this statement he used the company's method for dividing expenses common to passengers and freight. But he presented for the year ending December 31, 1920, a computation of freight expenses based on the Commerce Commission's method. The first showing is Northern Pacific exhibit 17, the second Northern Pacific exhibit 18 (Trans. pp. 100-103).

In both statements the witness charged to freight service every expense peculiar to that service, and divided only those items of expense common to both passengers and freight. In exhibit 17 he divided common station service in proportion to train mileage, common yard service in proportion to switching time in each service, mixed engine service and mixed train service 80% to freight, unassignable casualties in proportion to train mile-



NORTHERN PACIFIC RAILWAY
IN THE
STATE OF WASHINGTON

Approx. Scale: 1 Inch = 40 Miles.

Lines East of Ellensburg shown thus: ———

Lines West of Ellensburg shown thus: ———

Office of Chief Engr. N.P.Ry. St. Paul Minn. Jan. 5, 1925.

age, miscellaneous service like despatching, telephone and telegraph operation, signal and interlocker operation, crossing protection, drawbridge operation, superintendence, stationery and printing and insurance in proportion to train mileage, common expenses on equipment, like locomotive repairs, shop work, superintendence, injuries to persons in shops, etc., partly on the basis of locomotive mileage and partly on the basis of train mileage, maintenance of way and structures in proportion to locomotive mileage, traffic and general expenses in proportion to train mileage (Trans. pp. 519, 521-523, 525-6).

The railroad companies' bases of division before indicated differed in some particulars from that directed by the Commerce Commission for annual reports (mainly that the Commerce Commission divides on coal consumed where the Northern Pacific divides on train miles or engine miles). Had the Commerce Commission's method been used in exhibit 17 a higher cost chargeable to freight would have resulted.

Having ascertained the total expense of freight service on the two road divisions covered by the study it was next necessary, in order to ascertain the expense per car mile, to divide total expense by total car miles of freight moved on the two divisions; and as it costs something to move empties, but evidently not as much as loaded cars, it was necessary to reduce the empties and loaded cars to the same basis. For this purpose two empty cars are customarily and properly counted as equivalent

to one loaded car (Trans. p. 521). The witness in making his statements therefore added one-half the empty car miles to the actual loaded car miles to get what is termed in his exhibit "estimated loaded car miles."

Then the total freight expense was divided by the total "estimated loaded car miles" and the result is the expense per loaded car mile. This is the method followed by the witness in reaching the figures shown in columns of his exhibit headed "Per estimated loaded car mile." The total main line station expense for example of $309,874 equals 5.24 cents per estimated loaded car mile; and the total transportation expense on main lines for the three months, counting in Seattle and Tacoma terminals, $1,188,472, amounts to 20.09 cents per estimated loaded car mile. In the same manner all the expenses are divided.

In view of the contention that expenses of the terminals on Puget Sound, particularly at Seattle and Tacoma, were incurred on account of the logs in small part compared with other freight, this terminal expense is separately shown and ultimate cost is shown both including and excluding it. It will be observed that these terminals are on the main line and do not affect expense on branch lines.

The next step was to apply the per car mile expense to the logs actually hauled in the test period. The actual number of loaded cars of logs moved during the three months was 25,215, with an average haul of 32.2 miles. Multiplying the number of cars by 32.2 gives the loaded car miles

on both main and branch lines. Adding one-half the empty miles gives 1,217,884 "estimated loaded car miles." Dividing this movement between main line mileage and branch line the main line movement was found to be 302,888 or 24.87%, while the branch line movement was 75.13%. It is plain therefore that any controversy as to terminal expense is limited to 24.87% of the traffic. The cost of main line traffic (including cost of the terminals) multiplied by the main line car mileage of 302,888 equals $105,132.42 as the main line cost of log traffic if the terminals are included. If they are wholly excluded this cost is $53,308.29. The branch line log miles 914,996 multiplied by branch line cost per estimated loaded car mile 35.52 cents, equals $325,006.58, which is the branch line cost. The total cost of log traffic is thus shown as $430,-139, if terminal expenses are included and $378,-314.87 if terminal expenses are wholly excluded. But this statement is without any charge for taxes or interest (Trans. pp. 100, 517).

The exact sum earned by logs during the three months was $376,871.79. This revenue subtracted from the expense of $430,139 leaves a net operating loss of $53,267.24, without taxes or return on investment. This includes the operating cost of terminals, and if that be wholly excluded the operating deficit would be $1,443.08. It is certain however that the logs actually moved into and through the terminals and therefore should participate to some extent in the terminal expenses.

N. P. exhibit 18 was also prepared by Mr. Peterson. This covers the full year and freight and passenger common expenses are assigned here according to the Interstate Commerce Commission's method. The total expense of log traffic shown in exhibit 18 (Trans. p. 535) for the year 1920 was $1,848,209.80, including expense of terminals. The total revenue from log traffic was $1,308,875. The net operating loss, without taxes or return on the property, was therefore $539,334.48. Or excluding wholly expense of terminals the net loss was $318,047.24.

These exhibits were based on and confined to the territory in which logs moved. They evidence an earnest effort to throw light on the subject and to prove actual cash outlay for carrying logs. The revenues shown in them were those actually received, received under rates which the Department's order reduced about 20%.

It is a striking fact that these computations were questioned at no stage of the case and stand wholly uncontradicted unless they are overthrown by the findings of the Commission which we shall consider in due course. They were on the same lines and substantially the same bases as those held to prove uncompensatory character of the lignite traffic in *Northern Pacific Railway Co. v. North Dakota,* 236 U. S. 585.

The showing of exhibits 17 and 18 is on the basis that the cost of transporting logs is equal to the average of all freight on the two divisions of road. As the log traffic has an average haul of

only 32 miles and requires an empty car movement equal to loaded movement; as the idle time of cars both in loading and unloading is equal whether the haul be short or long; as the logging branch lines have high grades, light traffic, and disproportionate expense of operation; as the breakage of logging equipment is abnormal and the idle time consumed in repairs much larger than the average; it is easily maintainable that the cost per car of hauling logs is above the average. Witness Nicholson, general manager of the Chicago, Milwaukee & St. Paul (Trans. pp. 399-401), and witness Albee, division superintendent of the Northern Pacific (Trans. pp. 556-561), give good reasons for saying that the log traffic costs more than the average.

The Department in finding VII said that the proofs of cost submitted by the carriers were based on the year 1920, since which there has been a decline in labor and materials, and that at the present time (i. e. the time of the finding) railroad operation costs approximately 20% less than a year before. But in finding VIII it appears that the Commission attributed a large part of the 1920 cost to empty car movement due to bringing cars back from foreign lines after federal control. This is an erroneous finding, because the carrier's cost figures were confined to operation of the Seattle and Tacoma divisions and contained no charges for bringing home empty cars from foreign lines. Finding VII is contrary to the evidence as shown by N. P. exhibit 42 (Trans. p. 177). This exhibit

and the testimony of witness Peterson in regard to it show that the traffic had so far fallen off in the first six months in 1921 that unit costs were as high as in 1920. Great Northern exhibit 23 is based on 1921 costs and the showing of that exhibit is elsewhere stated. The Department was not warranted in disregarding these proofs and in basing its decision on speculation as to the future. *Smyth v. Ames*, 171 U. S. 361, 365; *Paducah v. Paducah Ry. Co.*, 261 U. S. 267, where the court said:

> "We have examined the record and are satisfied that the fares prescribed by the ordinance of September 21, 1920, were shown to be too low under the conditions existing at the time of the trial, and that the company is entitled to the injunction."

2. Value of property.

We shall not go largely or closely into valuation of the property used for log transportation. It will be evident at least that property of very large value is devoted in part to this transportation, and that to say the least a large sum for return on value must be charged against it. The Northern Pacific offered evidence on the subject of value which was in no way questioned or contradicted, and briefly we will call attention to this evidence.

N. P. exhibit 34 (Trans. p. 117) was testified to by witness Allen (Trans. p. 700). This statement covers land values only and gives what is called naked land value and railroad value, railroad value

being that value which naturally and ordinarily would have to be paid by a railway acquiring the property. It is sufficient for this case to take the naked land value which is $3,462,123 for the Tacoma division and $2,183,288 for the Seattle division (both figures excluding terminals), and a total value of $21,686,531 for land in the terminals. It appears from the testimony of the witness that the real property was once valued by the Washington Commission and that it is in process of valuation by the Interstate Commerce Commission. The witness says he has followed the methods being followed by the Division of Valuation of the Interstate Commerce Commission. His results do not differ widely from those of the State Commission or from what he expects from the Commerce Commission.

N. P. exhibit 35 (Trans. p. 119) was made by witness Bryan whose testimony commences p. 703 Transcript. A summary of his figures is given on the first page of the exhibit and the total value he places on the two divisions over which logs move is $116,330,603 (exclusive of land but including a pro rata share of equipment). Witness furnished additional sheets (printed Trans. pp. 120-170) showing in great detail, as to each piece of road and each terminal, how his figures were arrived at. He took the property as of June 30, 1917, and used unit prices of 1914, which is the Interstate Commerce Commission's rule applicable to the Northern Pacific (Trans. p. 706). He added the cost of additions made after June 30, 1917,

made no deduction for depreciation and made no attempt to apply present day prices.

In respect of valuation, as of cost of transportation, there was presented a full showing in complete detail, easy of attack if vulnerable; but no attack was made on either. We repeat that as far as value is concerned we are not asking the court to find any particular value whatsoever, and therefore not asking the court to pass on matters which might be open to controversy. We do say that the studies presented were limited to the property used in whole or part in the transportation of logs, and therefore were on a proper basis; and that the showing cannot be met by any showing proceeding on an obviously improper basis. Mr. Calderhead, long the expert of the Department of Public Works and its predecessor bodies and who had to do with the Washington Railroad Commission's 1908 valuation of the same property, when his attention was called to the figures on these exhibits, had no criticism of them; he said in effect that if the valuation of the railways made by the Washington Commission were supplemented by additions and betterments since made, there would be found very little difference between the finding of the Washington Commission and the value which would be found by the Interstate Commerce Commission (Trans. pp. 752, 757).

The uncontradicted proof was that the two divisions of the Northern Pacific on which logs moved would cost to reproduce (using 1914 prices) over $130,000,000 Seattle and Tacoma terminals in-

cluded, and over $87,000,000 terminals excluded. These figures include what is called "naked land value," that is they contain no addition for what is called "railroad value" and they contain no charge for depreciation. Whatever may be said about including the terminals some part of their value is certainly to be counted because the logs make a substantial use of the terminals. It is conservative to say that the log traffic on the Northern Pacific is chargeable with a fair part of the reasonable return on a valuation which approximates or perhaps exceeds $100,000,000.

The proportion of this value apportioned to the log traffic by Northern Pacific witness Peterson was thought by the Department's expert, Mr. Calderhead, to be correct. He testified as follows (Trans. p. 757):

> "Q. You understood how Mr. Peterson apportioned the property to the value of the logging traffic?
>
> A. Yes, sir.
>
> Q. Have you got the figures to compile that on a different basis?
>
> A. I do not know that I would desire to compile it on a different basis.
>
> Q. Do you think that is a fair basis?
>
> A. I would be inclined to think that operating expenses assignable to freight would be probably a proper basis for divisions because it is different from revenue. It is at least more equitable than the revenue basis.
>
> Q. That could not be used in the rate basis?
>
> A. I do not know it, but if they did, they used rate judgment.

Q. You think to use the revenue basis is to beg the question? So you think this basis used by Mr. Peterson is fair?

A. I would be inclined to say so. I would not say there could be very much exception taken to the division made in operating costs."

Mr. Peterson charged to the log traffic 6% per annum on that part of the valuation he thought attributable to the logs; this he ascertained by first dividing value of road and land between freight and passenger business on basis of freight and passenger operating expenses and then charging log traffic on the ratio of log car miles, loaded and empty, to total loaded and empty car miles freight of all descriptions. As to equipment, value of all log cars was assigned direct to logs and gross ton mile proportion of total value of locomotives and cabooses in freight service Seattle and Tacoma divisions was also so assigned. See N. P. exhibit, Trans. pp. 188, 189, 732-737.

Log traffic on this basis would be chargeable with $1,037,751 per annum if terminals be included and $706,262 per annum if terminals be wholly excluded.

3. Taxes.

For 1920 Northern Pacific property taxes in Washington were 11.14% of gross receipts both from state and interstate traffic (Trans. p. 733). Witness Peterson therefore charged to the logs 11.14% of the gross receipts from log traffic (Trans. p. 733 and exhibit 47 Trans. p. 187) mak-

ing $147,658. Of federal income and war taxes of the entire Northern Pacific system 1.17%= $18,961, was charged to logs, on the proportion of gross revenue from logs to entire gross revenue of the system. The total sum thus charged by Peterson on account of taxes was $166,916.

SOME OF THE FACTS AS TO THE GREAT NORTHERN.

Witness Turnburke, called by the Great Northern Railway Company, presented a cost study of log movement on the main line of that company distinctly different from the proof for the Northern Pacific and from anything presented by the association of shippers. His conclusions are not based on any system of averages but are the result of the most direct possible study of the cost of handling logs.

Mr. Turnburke selected for study a particular movement on the Great Northern between stations Gold Bar and Everett. This he chose as a typical movement and one eminently fair to the loggers for the following reasons (Trans. pp. 295-304): first, it is the largest movement of logs on the Great Northern in the state; second, the haul, 31.3 miles, is approximately the same as the average haul of all logs on the Great Northern lines in the state, 32.0 miles; third, the movement is over the main line, with the resulting low cost that goes with main line movement; fourth, the analysis of road haul cost was conducted for solid train loads of logs, which resulted in a lower cost being ascertained for the train movement than if the logs

had to be switched in and out of trains of mixed freight; and fifth, the Public Service Commission had previously found in the case of *Wallace Falls Timber Company v. Great Northern Railway Company,* First Annual Report Department of Public Works, pp. 14-18, that the movement between Gold Bar and Everett is handled by the carrier at less cost and expense than is ordinarily incurred in the transportation of the logs of other shippers.

The cost of service was divided into three main items, operating expenses, taxes, and capital charges. Operating expenses were further broken up into road haul, yard handling and other items of cost. Hours of service of train and engine crews were obtained from time slips of men actually engaged in handling the solid log trains studied. Fuel consumed was determined from individual fuel tickets prepared by enginemen at time of taking fuel on these particular trips. Engine expenses comprising locomotive repairs, lubricants and supplies and enginehouse expenses, were the average for the particular class of engine handling the log trains and for the particular territory over which these trains moved. Car repairs were determined from an actual study of the cost of repairs to the particular cars in log service. Cost of yard switching at the log dump was based on actual observation of time required to handle log cars. All of the above hours of service for labor, or units of material used, were applied to the reduced rates of wages and material costs effective subsequent to July 1, 1921, when substantial re-

ductions in wages became effective. Maintenance of way expenses after reducing to lower wage levels effective after July 1, 1921, were assigned to log movement on basis of relation of fuel consumed by log trains compared with total fuel consumption, this being the basis prescribed by the Interstate Commerce Commission for separating maintenance of way expense between freight and passenger services; on the theory that the fuel consumed bears a direct relation to the amount of steam produced and steam produced is in turn related to tonnage and speed of train handled. The direct expenses described above amounted to about 80% of the entire operating expenses, the other 20% being general expenses, the portion assigned to logs being determined by the relation between such general operating expenses for the whole state to the total freight operating expenses for the state.

Compare the operating cost developed as described of $19.81—which includes no taxes or capital charges—with the revenue that the Great Northern will receive for the movement from Gold Bar to Everett, under the scale of rates ordered by the Department. The rate ordered is $1.75 per thousand feet for distances over thirty, and not over thirty-five miles. The minimum load for single car shipments is 7,000 feet per each car equipped with steel bunks, and 6,500 feet per each car not so equipped. Applying the 7,000 feet minimum to the $1.75 rate gives a revenue of $12.25 per car, which is the most the Great Northern can

hope to be paid for a transportation service involving an out of pocket expense of $19.81 per car, without the allowance of one cent for taxes or capital charges.

Witness next assigned taxes to log service on the proportion of log revenue to all revenue. Capital charges for equipment were assigned to log service on the basis of 6% of original cost of locomotives, cars and cabooses used in log service, using ratio of mileage in log service to total mileage made per year in all services. Capital charges for fixed property were assigned to log service on basis of 6% of value fixed by the State of Washington for that part of line in use by log cars. This value was that made by the Railroad Commission in 1908 plus additions and betterments to 1916. Assignment to log service was on basis of number of trains passing over this section of track.

The total expense of this log movement which has heretofore been found by the Department of Public Works to be the most economical on the Great Northern Lines in the state, is therefore found to be:

Road Haul, direct expense per car	$ 9.32
Yard Handling, direct expense per car	2.36
Maintenance of Way expense, per car	4.06
Miscellaneous expense, per car	4.07
Total operating expense (out of pocket)	$19.81
Taxes, per car	1.69
Capital Charges, per car	3.73
Total Operating Expenses, Taxes and Capital Charges	$25.23

Revenue, per car, at rate prescribed by Department	12.25
Deficit, per car, from Department's order	$12.98

In short, the revenue to the Great Northern on two cars of logs at the rates ordered by the Department will not pay it for the expense of handling one. It is obvious that there is no error in Great Northern cost study which will compensate for such a discrepancy.

Put in another way, you may disregard the yard handling expense, the miscellaneous expense, the taxes and the capital charges, and look only to the road haul and maintenance of way expenses, amounting to $13.38, and still find a deficit by comparison with the prescribed revenue of $12.25 per car.

Applying the results found by the study of the Gold Bar movement to the entire transportation of logs on the Great Northern lines in the state, the following result is obtained:

Revenue from logs, January-August 1920	$221,174
Add 25% for increase in rates, effective August 26, 1920	55,294
Revenue from logs, September to December, 1920	97,316
Switching and demurrage revenue (logs)	473
Total Revenue at increased rates	$374,257
Operating Expenses	425,578

Net Deficit from railway operations	51,321
Taxes	36,322
Railway operating deficit	87,643
Capital Charges applicable	80,218
Net Loss from handling logs	$167,861

The assignment of capital charges in any way that may be suggested does not substantially alter this result, and it is therefore unnecessary to go into any complicated discussion of the proper basis of assigning capital charges to the log business for the purposes of the present demonstration, since, disregarding capital charges entirely, it is manifest that the rates ordered by the Department will fall far short of paying operating expenses, to say nothing of taxes.

The Great Northern presented satisfactory proofs of the value of its property, which were not contradicted and which hardly require statement here.

FACTS AS TO THE MILWAUKEE AND OREGON-WASHINGTON COMPANIES.

Witnesses Albee (Trans. p. 553), Mount (Trans. p. 455), Nicholson (Trans. p. 399), McDonald (Trans. p. 766), and other witnesses described the conditions of log transportation on each of the four railroads. It was shown that these conditions are about the same on all. The business originates mostly and is carried largely on branch lines. On the lines of all four companies the haul is short. The log shippers showed in their exhibit

2 (Trans. p. 86) that the average haul on the Northern Pacific was 31.38 miles, on the Great Northern 32.02 miles, on the Milwaukee 23.81 miles, on the Oregon-Washington 15.02 miles. The general facts we have stated as to the Northern Pacific apply to the other roads and need not be repeated. It was testified as before shown, both by the expert for the Department of Public Works and by the expert for the shippers, that the Northern Pacific had the largest volume and the greatest density of business and could stand a lower rate than any of the other companies. Acceptance of that fact by everyone concerned in the trial centered the fire on the Northern Pacific. There can be no doubt, and we think it will be conceded, that a scale of log rates unremunerative on the Northern Pacific is still more so on the lines of the other companies.

But each of the other companies made a showing of its operating expenses and the value of its property in the state attributable to logging business. That showing will be stated in another brief.

For the reasons stated we have centered our effort on making the Northern Pacific showing intelligible to the court, fully appreciating the fact testified to by Mr. Calderhead and Mr. Gray that lower rates might justly be applied to the Northern Pacific than to the other lines, and that the shippers clearly perceiving this have exerted their main effort to fastening on the Northern Pacific a scale of rates, knowing that for the most part they would have to be accepted by its competitors.

HOW THE DEPARTMENT MET THESE PROOFS.

By the foregoing testimony the carriers made a fairly persuasive showing that the present log rates are uncompensatory, and *a fortiori* that rates further reduced would be. This showing was not contradicted or questioned in the findings of the Department. Those findings sought to meet the showing in a most remarkable way next to be explained. Finding XIII shows how the Department made out that instead of a deficit the four carriers had during the year 1920 a net earning of $818,448, from transportation of logs. The Department method is best shown in its own language:

> "In arriving at the net revenue from log traffic earned by the four principal carriers within the state during 1920, of $818,448, the following method was used:

Gross revenue from log transportation	$2,859,172	
Incidental freight revenue assigned to log transportation	56,232	
Total Revenue		$2,915,404
Operating expense assigned to log transportation	$1,923,198	
Taxes assigned to log transportation	173,758	
Total Expense		2,096,956
Total Net		$818,448

> In arriving at the operating expense assigned to the log traffic, the cost of freight operation within the State of Washington was calculated upon the basis of the cost per 1,000 gross ton miles of handling all freight upon the combined systems of the four principal carriers, and in this manner the total cost of freight operation assignable to the State of Washington was found to be $38,678,870, which is equivalent to a unit operating cost of $5,321 per 1,000 revenue gross ton miles handled by the four principal carriers within the state during the year in question. On this basis the cost of handling the log traffic within the state during the year by such carriers was $1,923,198. The taxes assigned to the log traffic are one-half of those contended for by the carriers after the elimination of income taxes. All of the figures used in this calculation are contained in the annual reports filed with us by the carriers, or were taken from the exhibits supplied by the carriers in this case."

The Department found from annual reports of the carriers the "cost per 1,000 gross ton miles" of handling all revenue freight upon their systems and took the average of the four. The Chicago, Milwaukee & St. Paul extends from Chicago to Puget Sound, the Northern Pacific and Great Northern from Wisconsin to Puget Sound, and the Oregon-Washington system lies in several states. No more remarkable process ever was discovered. It is an astounding principle that the cost of hauling sawlogs west of the Cascade mountains in Washington, which move an average of less than 32 miles, on peculiar lines of road, in peculiar equipment, and under conditions wholly different

from those of other states and of other traffic, is to be ascertained by the average cost of all kinds of freight on the entire system of four transcontinental railroads, having an average movement of several hundred miles. As well take the average cost on the New York Central road. The court will observe the view of this taken by the dissenting judges in the supreme court of Washington (Trans. pp. 58-62).

It thus appears that the Department made no inquiry into or finding upon the cost of hauling the logs, and no such arbitrary invention as is offered can overcome the showing made by the carriers.

The Department fell into equal error touching value of property. How it found value is shown in findings XIV and XV (Trans. pp. 25, 26) as follows:

> (XIV) "The present main track mileage of the four principal carrier within the State of Washington is 4,936 miles. The actual value of all the property owned within the state by such carriers, as shown by Great Northern exhibit No. 25 (same being the minutes of the 1921 proceedings of the State Equalization Committee), is $294,360,243, of which $255,672,247 represents real property, while $38,687,996 represents rolling stock. The cost of the aforementioned property is unknown, valuation now in progress by the Interstate Commerce Commission being incomplete, but the Washington Railroad Commission found that the actual cost of 3,007 miles of main track within the state was approximately $50,000 per mile, which cost included terminals, rolling stock and all operating property of every kind. Upon the basis of a cost of $50,000 per mile, the property of the four principal carriers within the state would have a total cost of $246,800,000."

(XV) "For the purpose of estimating the approximate rate of return earned by the four principal carriers within the state from the log traffic during the year 1920, we will assume the value of the property of such carriers within the state which is in any way used or useful in connection with the log traffic, is $300,000,000, a greater sum perhaps than the evidence will justify. Following the method of division as indicated by the carriers' exhibits, it is considered that not more than 75 per cent of such value, or $225,000,000 is assignable to the freight business within the state. During the year 1920 the gross ton miles of logs, hauled by the four principal carriers within the state, constituted 4.97 per cent of the total gross ton miles of revenue freight hauled within the state by such carriers. It is therefore considered that five per cent of that part of the value of the carriers' property assigned to freight service should represent the tentative rate base for use in determining the rate of return earned by the log traffic in 1920; this tentative rate base being $11,250,000."

The aggregate value of $300,000,000 for all the carriers' properties in the state of Washington assumed by the Department, of which $11,250,000 is assigned to log traffic, is utterly without support in the evidence. The $294,360,243 referred to by the Department is taken from the minutes of the State Board of Equalization and is therefore some figure once made for purposes of taxation. The cost of the property the Department says is unknown, but the State Railroad Commission had found in 1908 the *actual cost* of 3,007 miles of then main track to be $50,000 per mile, and $50,000 per mile

is therefore seized on as the *value* fourteen years later of 4,396 miles of main track.

Reference by the Department to the Railroad Commission's valuation was to a valuation made under section 12 laws Washington 1905, amended by section 5 laws 1907, p. 545. The valuation under this law was mainly for taxing purposes; and although the law provided for further valuation of additions and betterments no such valuation has taken place, apparently because a new act has committed taxation to a state tax commission. There has been nothing added to this valuation for betterments and improvements since the year 1912. See Mr. Calderhead's testimony, Trans. p. 751.

Not only was the Railroad Commission's value of $50,000 per mile ancient and incomplete, but when made in 1908 it included for the most part the Northern Pacific and Great Northern. The Chicago, Milwaukee & St. Paul was not valued in 1908 and its lines were not included in reaching the average cost of $50,000 a mile.

In the next place the valuation was not confined to the property used in whole or part in transportation of logs. It included all the lines within the state of which log transportation is confined to the western part.

The only proper value is the value of the property used in the traffic. *Northern Pacific Railway Co. v. North Dakota*, 236 U. S. 585. To use a percentage of the aggregate value of the four properties in the state and say that is the aggregate value of the property used in log traffic is a clear error.

The Department did not determine the value of the property of any one company, notwithstanding the validity of the order as to each company depends on its effect on that particular company. *Minnesota Rate Cases,* 230 U. S. 352.

The Department took no account of either additions and betterments after 1912, or present day values, prices or costs. It fell into error in this. *Southwestern Bell Telephone Co. v. Public Service Commission,* 262 U. S. 276; *Bluefield Water Works v. Public Service Commission,* 262 U. S. 679, 689, 691; *City of Minneapolis v. Rand,* 285 Fed. 818, 827.

As to taxes the Department's finding XII held that because logs are for the most part handled on inexpensive branch lines and make little use of costly terminals, and because the rolling stock is comparatively inexpensive, only 50% of the property taxes apportioned to logs by the carriers on the basis of gross receipts would be allowed. The Department disallowed federal income taxes altogether. The disallowance of federal income taxes is contrary to *Galveston Electric Ry. Co. v. Galveston,* 258 U. S. 388, and to *Georgia Ry. v. R. R. Commission of Georgia,* 262 U. S. 625, 632-3. The Department made a mere guess in assigning to logs only 50% of the property taxes and this allotment rests on no basis whatsoever except guesswork. Taxes within the state were charged against the traffic in question in proportion to gross earnings in *Northern Pacific Ry. Co. v. North Dakota,* 236 U. S. 585, and in *N. & W. R. Co. v. Conley,* 236

U. S. 605. See *A. C. L. Ry. v. Daughton*, 262 U. S. 413, 417. It is to be noted also that the Department did not follow in respect of taxes the principle which it applied to operating expenses or to value. Had it assigned taxes on the principle it applied to operating costs or property value it would substantially have doubled the amount it did assign to taxes.

In contrast to the Department's methods stands the method adopted by the carriers. They attempted to show the present cost of carrying logs and the value of the property used in log business. The case is one to which the remarks of the court in the *Bluefield Water Works case*, p. 689, are peculiarly applicable. There Mr. Justice Butler said:

> "The record clearly shows that the commission in arriving at its final figure did not accord proper, if any, weight to the greatly enhanced costs of construction in 1920 over those prevailing about 1915 and before the war, as established by uncontradicted evidence; and the company's detailed estimated cost of production new, less depreciation, at 1920 prices, appears to have been wholly disregarded. This was erroneous."

HOW THE LOG SHIPPERS MET THESE PROOFS.

We have shown the method adopted by the companies and also that adopted by the Department of Public Works. For the conclusions stated by the Department's method there was an utter lack of evidence. The method of the Department was not suggested or advocated at the hearing and was an invention of its experts. See Department's finding XX Trans. p. 27. The only evidence at the hearing outside of that offered by the railway companies was given by Henry L. Gray, whose testimony will now be considered briefly.

Gray did not dispute the testimony of the railway companies. That is to say if it be proper in this case to ascertain the cost of hauling logs by assigning to the logs the average cost of all traffic on the divisions where logs move, coupled with proof that the particular traffic costs as much as, or more than, the average of all, it is beyond dispute that the log traffic incurred a large operating deficit. But Mr. Gray first finds from the reports of the carriers the average cost of each carrier for all traffic, state and interstate, in Washington per 1,000 gross ton miles. For the Northern Pacific this is $5.508; he multiplies the gross ton miles of logs by this average cost of all freight in the state and calls that "cost of operation, log traffic"; he deducts the cost thus ascertained from the total Northern Pacific revenue from logs in the state and terms the result "revenue from logs, net $253,-

578" (exhibit Trans. pp. 83-84). Testimony (Trans. pp. 635-639).

Gray assumes the same cost for log traffic as for all traffic in the state, state and interstate combined, although logs move only on a fraction of the lines within the state and on much shorter hauls than the average. His study is not devoted to cost on the lines where the logs move. He makes no allowance for non-revenue freight and he includes nothing for taxes (Trans. p. 645). If such a method be correct the cost of any traffic may be determined with mathematical accuracy.

It was shown that non-revenue freight is 20% of total freight and Gray's estimate of cost should obviously be raised 20% on this account or $211,059, which should be added to his cost of $1,055,297.

If taxes be included on the basis of 11.14% of gross receipts, amounting to $166,699 (including income tax), this further sum must be added to Mr. Gray's computation. This gives a net operating loss according to Mr. Gray's own figures of $124,100. That the allowance of 20% for non-revenue freight was necessary was afterwards conceded by Mr. Gray and is apparent. The Department made this allowance in determining its average system cost of average ton miles at $5.321. Mr. Gray did not pretend that he had ascertained the cost of log transportation. He said:

> "I have taken the freight traffic within the state of Washington as a whole, put it all into a jackpot * * *. I assumed the empty car miles in the log business as compared with the

loaded car was the same as other traffic" (although it is shown to be much larger). "I did not take into consideration the length of haul, but am dealing with the freight traffic as a whole. I have never stated that the figure I have introduced here represents the cost of handling logs. I have simply stated that taking the traffic in the state as a whole, of which logs are a large part, and reducing it down you get a certain gross figure, and applying that to the log business, you get a certain result.

"I don't know what the cost of handling the log business is as distinguished from the entire business. I don't know whether the log traffic produces more in proportion to the expense than other traffic. I am not a traffic expert. I have not differentiated between long and short hauls."

"I have not attempted to analyze the cost of handling the various kinds of traffic."

"I have made no effort to determine the cost of handling log traffic" (Trans. p. 642 et seq.).

Supervisor Cleland called the witness' attention to the fact that if his exhibit showed a profit on logs having an average haul of 31 miles and a loss on all other traffic with a haul of 200 miles, there is a profit being made on the short haul and a loss on the long haul, and the witness stated that his exhibit would indicate that (Trans. p. 651).

"Q. Now when you determined the cost of the log haul you applied the cost based on the longer operations where you have a longer haul, so then you have introduced an element which is misleading as to the actual cost of that log business.

"A. I have never contended that these figures represent the actual cost of hauling logs."

A member of the Department again called the witness' attention to the fact that his theory indicated a profit on the short haul and a loss on the long haul, to which he replied:

> "Well, it might be. I wouldn't be prepared to say. Apparently my head is not working clearly" (Trans. pp. 651-2).

TARIFF 29.

Tariff 29, sometimes called the Henry Tariff (Trans. opposite p. 12) was filed by the railway companies with the Department pursuant to its invitation or requirement. It abolished discriminations, subjecting all the logs on all the railways to distance rates,—that is rates based wholly on length of haul.

At the hearing before the Department which involved this tariff the carriers having shown (as before indicated) that existing rates were uncompensatory; that they imposed on the Northern Pacific for example in the year 1920 an operating loss of over $500,000 (not counting taxes or return on value); and that the showing was no better in the first half of 1921; next undertook to show what scale of rates would be needed in order to wipe out the deficit and return 6% on the value of property. In making this showing it was assumed that the log traffic would continue as heavy as in 1920, but the operating expenses were figured on the basis of 1921 allowing wage reductions by the Labor Board which became effective during that year.

Exhibit 47 of Peterson (Trans. pp. 185-190) makes this showing and his method is stated Trans. p. 732.

Existing log rates, the result of increases following Ex Parte 74, having been in effect only the last four months of 1920, witness first increased actual 1920 revenue for the first eight months by applying these rates and added actual revenue of the last four months. The result is $1,541,060, revenue that would have been received had existing rates been effective during the entire year. Witness took the operating expense for 1920 reduced by applying the reduced labor costs resulting from Labor Board decision 147 which went into effect July 1, 1921. The operating expenses thus reduced were determined as in witness' exhibit 18; determined both to include Puget Sound terminals in expenses and valuation and to exclude them in both. At Trans. p. 190 witness' final sheet compares his result "including Puget Sound terminals" and "excluding Puget Sound terminals". He showed that excluding the terminals both in expenses and valuation $842,982 additional revenue would be required by the Northern Pacific to pay a proper proportion of 6% net return; and he submitted a scale of rates that would raise this additional revenue. His scale, excluding the terminals altogether, names substantially the same rates as tariff 29, filed in obedience to request of the Department. We print below comparison of Northern Pacific present distance tariff rates, the two scales of rates testified to by Peterson as necessary (one including the terminals, the other excluding them), rates of tariff 29 and the Department's rates fixed by the order complained of.

Distances	Present rates including 25% advance Aug. 26, 1920	Based on compensatory return (including Puget Sound Terminals)	Based on same return (excluding Puget Sound Terminals) (See note)	Proposed rates Tariff No. 29	Department Rates
1 to 5	156½	248	198½	200	1.15
6 to 10	156½	248	198½	225	1.25
11 to 15	195½	310	248	250	1.35
16 to 20	211½	335½	268	270	1.45
21 to 25	219	347½	277½	280	1.55
26 to 30	227	360	288	290	1.65
31 to 35	234½	372	297	300	1.75
36 to 40	242½	384½	307½	310	1.85
41 to 45	250	396½	317	320	1.95
46 to 50	258	409	327	330	2.05
51 to 55	265½	421	336½	340	2.15
56 to 60	274	434½	347½	350	2.25
61 to 65	281½	446½	357	360	2.35
66 to 70	289½	459	367	370	2.45

NOTE: Based on average of 8,000 feet per car on traffic hauled in 1920. Variation in percentage of increase due to fractions. Excluding terminal eliminates expenses and land valuation of Puget Sound Division and track and structures and valuation of Seattle, Tacoma and Auburn terminals.

NOTE: At pages 737-739 Peterson shows how he made his rates and he referred to sheet 6 of the exhibit for detail. Sheet 6 by some oversight has not been printed but Peterson's evidence explains the process completely and the printing of sheet 6 seems unnecessary.

In this schedule the rate 26 to 30 miles would apply to the average haul of all the railroads. For this distance Peterson's compensatory rate, excluding terminals, is $2.88 per thousand feet; tariff 29 rate $2.90 per thousand feet. The comparison throughout between these two tariffs is very close. Unless Peterson's computations are greatly at fault, which has not been shown, the carriers were entitled to a scale of rates as high as those named in tariff 29.

This conclusion is strongly corroborated by the comparisons before made, which need not be repeated, between Washington log rates and many other rates; by the showing that the log rates in Washington are much below rates on logs elsewhere and much below rates in Washington and elsewhere applied on the lowest rated classes of traffic.

We submit that the carriers were entitled to rates at least as high as those of tariff 29.

But in case the court should hesitate about fixing definitely the minimum rates which may be forced on the carriers, we contend at least for a decree that the carriers are entitled to a substantial increase over present rates. The whole showing of the carriers was directed to proving that the present rates are uncompensatory. Unless this is proved the carriers of course are not entitled to an advance of present rates. But if they have satisfied the court by their showing they are entitled to a reversal which will leave tariff 29 in effect; or at the very least to a decree that the carriers are entitled to substantial advances over existing rates.

THE FACT THAT LOG TRAFFIC WAS ONLY PART OF THE STATE BUSINESS.

Proof was offered that the entire business of the Northern Pacific in Washington had been unprofitable from 1910 to 1920, inclusive, paying in those years a return on the State Board's inadequate valuation of 1911-12, varying from 4.67 the highest per cent in 1910 to a deficit of 2.06 per cent in 1920. The exhibit showing this was proven by the testimony of Mr. Calderhead, the expert for the Department. The valuation used was very much lower than present cost of reproduction, being a value of $126,000,000 put on the property for taxation by the Public Service Commission in 1911-12. It could have contained no allowance for present day increased prices, neither did it include additions and betterments after 1912. Exhibit 50 will be found at Trans. p. 195 and Mr. Calderhead's testimony Trans. p. 751. The only possible criticism on the statement is that indicated by Mr. Calderhead—a doubt as to whether interstate earnings and expenses are properly assignable between states on the mileage basis (that subject is elsewhere treated).

Mr. Gray, the expert of the shippers, testified to exhibit No. 4 opposite p. 88 Trans. At p. 640 Trans. he explained that this exhibit sums up all his preceding exhibits and shows for each of the plaintiff in error carriers that its total local business

in Washington for the year 1920 was unremunerative. While witness figured (as before shown) that the four carriers made a total profit from log transportation of $523,169, he said they sustained a corresponding loss of at least $8,233,587 on all their other freight traffic handled within the state.

But was it necessary in view of the other proofs to show the unprofitable character of any company's whole business in the state? No universal answer to this question seems possible. We think the answer must depend on the facts in each case.

N. P. exhibit 19 (Trans. p. 106), is a statement for eleven months ending November 30, 1920, of the carload traffic of the Northern Pacific local within the state of Washington; the log traffic, 97,000 cars, constituted 50.48% of the total cars, and tonnage of log traffic 3,096,056, was 49.67% of total tonnage; but the ton miles of logs were only 23.71% of the total, the car miles 24.31% of the total, and the revenue was only 17.81% of the total; the average haul of log cars was 31.2 miles and the average of other carload freight 99.2 miles; the logs constituted far the largest item of the carriers' local business in Washington, on all four roads taken together over one-half the total both of number of carloads and weight; the relation of logs to total in respect of ton miles, car miles, and revenue is much smaller because of the very short haul on logs and the very low rate.

This case therefore is unlike *Wood v. Vandalia Railroad Co.*, 231 U. S. 1, where the state regula-

tion affected so small an amount of traffic as to make an almost negligible effect on the carrier's net earnings. It is also unlike *Wood v. Vandalia Railroad Co.* and *Minnesota Rate Cases* (see 230 U. S. 353, 465-467) because there was in this case proof of the value of the property affected by the order and proof of the cost of rendering the service in question. At the least the proof on both these subjects was carefully made in detail, is reasonably convincing, and has not been met.

The case stands on the evidence as one where the state has singled out one class of transportation, very important in volume, constituting over half in tonnage and cars handled of all the carriers' business subject to state regulation; and has imposed thereon rates which produce an actual operating deficit, which take from the carriers pockets something for handling the business, without counting any return on investment and without counting taxes.

The rule of law applicable to such cases seems that applied in *Vandalia Railroad Co. v. Schnull*, 255 U. S. 113; *Northern Pacific Railway Co. v. North Dakota*, 236 U. S. 585; *Norfolk & Western Ry. Co. v. Conley*, 236 U. S. 605; *Interstate Commerce Commission v. Union Pacific Railroad Co.*, 222 U. S. 541, 549; *Brooks-Scanlon Co. v. Railroad Commission of Louisiana*, 251 U. S. 396.

APPORTIONMENT OF EARNINGS AND EXPENSES TO THE STATE.

Interstate earnings are apportioned to Washington in proportion to mileage of each shipment within the state compared with total mileage. That small part of operating expenses which pertains to more than one state is apportioned by mileage. In *Atlantic Coast Line v. Daughton,* 262 U. S. 413, 417, Mr. Justice Brandeis speaking for the court said: "Seaboard being an interstate carrier, the accounts were kept as required by the Interstate Commerce Commission. Interstate business was apportioned, as customary, according to mileage." This statement was advisedly made. It is believed that railroad companies universally apportion their interstate business in this manner. They report to the Commerce Commission and are required to report to each state, and these reports from the beginning have apportioned to each state interstate earnings and expenses according to mileage. This practice has been open and well known to the Commerce Commission and therefore may be said to meet with its approval. To say the least the Commission has never objected.

When it is said, as it will be, that Washington is a terminal state and an originating state and that there are differences between it and states like Montana and North Dakota, that may freely be conceded. But when it is said that this requires a different principle from that of mileage to deter-

mine state of Washington earnings from, or expenses of, interstate traffic, we have a right to ask: What rule is to be substituted. No man yet has been able to suggest any possible answer to that question.

In cases like this Montana and North Dakota invariably make contentions directly contrary to those made by states like Minnesota and Washington. But the mileage basis of division is in universal use and it is not possible to suggest any other.

Undoubtedly difficulties like this show that railroads ought to be treated as a unit. But as long as they are subject in large measure to a dual control and as long as they are required by public law to divide their earnings and expenses between states the mileage division which custom has approved, and which is really the only one possible, must we think be accepted.

EXPERIMENTAL CHARACTER OF THE ORDER.

The order fixed rates "to remain in effect during an experimental period of twelve months from the effective date thereof, or until the further order of this Department" (Trans. p. 30). It will no doubt be contended that this brings the order under the principle of *Willcox v. Consolidated Gas Co.*, 212 U. S. 19; *Northern Pacific Railway Co. v. North Dakota*, 216 U. S. 579, and *Brush Electric Co. v. Galveston*, 262 U. S. 443.

But in those cases, where experiment with the new rates was held proper, the proof presented was solely to the point that the *new rates would be confiscatory*, and in neither case was such proof thought to be satisfactory. On the contrary in this case the proof was satisfactory that existing rates are uncompensatory; and existing rates have been sufficiently experimented with to make satisfactory proof possible. Therefore there has already been all the experiment which was required in the decisions referred to. It cannot be doubted—indeed has been adjudged in this case—that the proposed rates as compared with existing rates will cost the Northern Pacific approximately $200,000 per annum, the Chicago, Milwaukee & St. Paul approximately $271,000 per annum, the Oregon-Washington approximately $40,000 per annum, and the Great Northern approximately $120,000 per annum (see order fixing supersedeas on appeal, Trans. p. 51).

CHARLES W. BUNN.

Office Supreme Court, U. S.
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Clerk

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1924.

No. 371.

NORTHERN PACIFIC RAILWAY COMPANY, and others,
Plaintiffs in Error,

vs.

THE DEPARTMENT OF PUBLIC WORKS OF WASHINGTON, and others.

BRIEF ON BEHALF OF PLAINTIFF IN ERROR, CHICAGO, MILWAUKEE & ST. PAUL RAILWAY CONPANY

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SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1924.

No. 371.

NORTHERN PACIFIC RAILWAY COMPANY, and others,
Plaintiffs in Error,

vs.

THE DEPARTMENT OF PUBLIC WORKS OF WASHINGTON, and others.

BRIEF ON BEHALF OF PLAINTIFF IN ERROR, CHICAGO, MILWAUKEE & ST. PAUL RAILWAY CONPANY

STATEMENT

In December, 1920, each of the plaintiffs in error had on file with the Public Service Commission a large number of tariff schedules prescribing the rates, rules and regulations governing the transportation of logs between various designated points on its line in the State of Washington. The rates thus prescribed were, for the most part, special commodity rates applicable between particular points named in the schedule. A statement of these different schedule

rates will be found in Department Exhibit "A" (Record p. 72.) The history of this manner of making these rates is narrated by Mr. Capron (Record pp. 482-484, f. 286-289), Mr. Plummer (Record p. 693, f. 682), Mr. Mount (Record pp. 455, 456, f. 241-245), and Mr. Albee (Record p. 558, f. 416-7). It is not necessary, however, to go into this history further than to say that for a number of years prior to 1905, when the first statute creating a railroad commssion in the State of Washington and requiring the filing of rate schedules was enacted, the railway companies had pursued the policy of fixing log rates upon the applications of parties desiring to begin the manufacture and shipment of logs, by fixing the particular rate which would apply from the special point of shipment to the special destination. These rates would be arrived at by agreement between the parties. When the Act of 1905 requiring the filing of tariff schedules, was passed, schedules were prepared and filed protecting these contract rates, although, of course, the rates thus fixed were opened to all shippers of logs between the specified points. After the passage of the act of 1905 a similar policy was pursued. A party desiring to engage in logging on a particular road and who expected to ship his logs to some definite

point, would, if there was no rate prescribed for log shipments from the place from which he expected to ship to the desired destination, apply to the company operating the railway over which such logs would move, to fix a rate thereon. These applications would be granted and a commodity tariff prescribing the rate (usually agreed upon in advance) would be filed. The rates prescribed in these tariffs would be controlled by the conditions peculiar to the service to be performed by the carrier in the transportation of the logs over the particular line. In this way there had come into existence a large number of separate commodity tariffs for the transportation of logs on the lines of each of the plaintiffs in error, each applicable to shipments between specified points, but although open and uniform to all shippers between such points, bearing no fixed and definite relation, so far as rates were concerned, to the rates prescribed in the similar schedules naming rates between other points. In addition to these commodity rates the Northern Pacific and Chicago, Milwaukee & St. Paul Companies each had in effect a distance tariff, that is a tariff wherein the rates were graduated according to the length of the haul, the rate being increased with each additional five miles. The distance tariff rates were, however, as a rule,

higher than the commodity rates and the bulk of the log transportation was performed on the basis of the latter.

None of these rates, commodity or distance, were joint rates or published as rates common to two or more lines, but each was a rate prescribed in a tariff schedule filed by the company fixing such rate, as a schedule effective upon its line only. (Department's Exhibit A; Record p. 72.)

In December, 1920, the Public Service Commission of Washington instituted an investigation of these log rate schedules by filing, as complainant, a complaint against the plaintiffs in error wherein it charged that the rates, charges, rules and regulations relative to the log transportation within the state embodied in these tariffs were "excessive, unreasonable, discriminatory and preferential" and gave notice that it would enter upon a hearing with respect thereto and would make such order as the facts found would warrant. (Record pp. 1-3.)

While this complaint named the four plaintiffs in error as respondents the fact that the tariff schedules of each company relative to the transportation of logs were its separate schedules and prescribed rates and regulations effective upon its lines only, and that there were no joint or

common tariffs, made this a separate charge against each of these companies with respect to its own particular rates and regulations.

The carriers thus complained against severally appeared and filed answers containing general denials of the material matters charged. (Record pp. 10-13, f. 11-17.)

During 1921 hearings were had upon this complaint by the Department of Public Works which had, by the provisions of chapter 7 of the Laws of Washington, 1920-1921, been vested with the jurisdiction with respect to railway rates, regulations, etc. theretofore vested in the Public Service Commission, that tribunal being abolished.

During these hearings each of the plaintiffs in error introduced evidence showing or tending to show the value of its railway properties employed in the transportation of logs; the cost to it of such transportation, segregated between operating costs, taxes and interest on investment; the revenue it derived from such business, etc.

The evidence thus introduced showed wide and material differences between different companies with respect to the value of their respective properties used in the log transportation; between their various revenue rates; between their revenues derived therefrom; and between their respective operating costs of transportation.

In view of these differences, the question as to the reasonableness of the existing rates and as to whether any such rates or any rates which might be prescribed were or would be compensatory or non-compensatory, non-confiscatory or confiscatory, was separate and distinct as to each of the plaintiffs in error, the answer being in each case dependent upon the investment and of the particular carrier, and the revenues earned by it from such business.

Each of the plaintiffs in error contends that the evidence introduced by it relative to its investment and costs chargeable against and revenues to be credited to its log transportation, incontrovertibly establishes that the rate prescribed as the result of this investigation was, as to it, confiscatory. But as it will be more convenient to consider the figures relative to these matters in connection with the discussion of that particular subject, such figures are not included in this statement.

During the hearing the Department expressed a desire that the plaintiffs in error submit a uniform tariff schedule showing such rates as they considered reasonable and acceptable for the log transportation. It was accordingly agreed that the carriers would prepare and file such a schedule, which should be considered as a compro-

mise tender and not as an abandonment of any of the figures or testimony as to what was necessary to make the log rates compensatory. It was stipulated that this schedule should be suspended and as, under the statute (Sec. 10424 Remington's Comp. Stat. of Washington), a hearing would have to be ordered thereon which would involve a repetition of the evidence in the pending proceeding, that the testimony taken in the pending case should also be considered as adduced in the hearing on such schedule. (Record pp. 819-823, f. 881-889; Stipulation and Additional Parts of Record pp. 160-165, f. 1311-1318; pp. 169-170, f. 1326-1328). Pursuant to this understanding the carriers, through the North Pacific Coast Freight Bureau, S. J. Henry, Agent, on November 16, 1921, filed a schedule of rates for the transportation of logs, such rates to become effective December 17, 1921. This schedule was numbered 29, W. D. P. W. No. 65. November 26, 1921, in a proceeding with respect to this schedule, numbered 5330, the schedule was suspended and the proceedings with respect thereto consolidated with the pending proceeding which was numbered 5159. (Record pp. 14-15, f: 21-33½.)

February 1, 1922, the Department filed its findings and order in the consolidated cases

(Record pp. 15-31, f. 33½). These findings, so far as material to the questions herein presented, and order, are as follows:

VI.

"The log traffic within the State of Washington is for the most part confined to a limited area, or the district west of the Cascade Mountains. In the case of the carriers operating in this area, the log transportation characteristics are substantially the same. It was conceded by all parties to this case that a uniform distance tariff covering the haul of logs within the State of Washington was desirable. The tariff proposed by the carriers, is a uniform distance tariff, applicable to all lines alike. It is the purpose of this order to establish a uniform distance scale.

VII.

"All operating cost exhibits introduced covered the year 1920, during which year the peak prices for labor and material were reached. (fol. 33½g.) Since 1920, there has been a marked decline in labor and material costs. As near as can be determined, the unit cost of railroad operation at the present time is approximately 20 per cent less than the unit costs of a year ago.

VIII.

"A considerable portion of the railway operating cost during 1920 was due to an abnormal empty car movement, occasioned by the efforts of the carriers to accomplish the return of their cars to their home lines after the relinquishment of unified Federal operation.

IX.

"The operating revenues assigned to the State of Washington are made up of revenues from interstate traffic, plus a part of the revenue from interstate traffic assigned to the State of Washington upon a straight mileage basis. However, the operating expense assigned to the State of Washington embraces all of the expense incurred within the state and includes all of the assembling and terminal expense on interstate freight. During the year 1920 the unit freight operating cost charged to the State of Washington by the four principal carriers was approximately 35 per cent in excess of the combined system average unit freight operating cost. According to the reports of these carriers, their combined systems earned a net profit in freight operation during the year 1920 of $12,943,697, whereas freight operations in the State of Washington are reported to have resulted in a loss of $6,934,966.

X.

"The unit freight operating cost within the State of Washington would be no greater than the system unit freight operating cost if the assembling and terminal expense in connection with interstate shipments is apportioned over the entire length of haul. Whatever increased cost may result from the haul over the Cascade Mountains is offset by the favorable climatic conditions within the State of Washington, as compared with the rigorous winters in the neighboring states of Montana, the Dakotas and Minnesota, which hamper the movement of freight, with a corresponding increase in unit operating cost, and the Cascade Mountains are certainly no more

formidable than the Rocky Mountains. If the unit freight operating cost incurred by the four principal carriers within the State of Washington is no greater than the system unit freight operating cost, then the freight traffic within the state during the year 1920, instead of producing a loss of $6,934,966, actually yielded a profit of $6,694,432. Whatever the correct rule for the allocation of terminal and assembling expense in relation to interstate traffic may be, it is not properly chargeable to the log traffic of this state.

XI.

(fol. 33½h.)

"Even if the unit freight operating cost within the State of Washington should be excessive on account of the haul across the Cascade Mountains, it should be noted that logs are not so hauled. The log traffic is one in which empty cars are hauled up grade, the loads being hauled down grade. Logs generally are delivered in lots of from ten to thirty cars, and rarely ever in lots of less than five cars, thus constituting a very desirable form of traffic. Due to the short haul of logs and the facilities for rapidly loading and unloading, the carriers are able to keep their logging equipment more profitably employed than the equipment used in the handling of other commodities. Log cars are under load a greater portion of the time than are other classes of equipment having the same average length of haul, while the tonnage of the logs per car is greater than in the case of the average commodity handled. There is considerable reason for the conclusion that the cost of log transportation is less than the average unit cost of freight transportation within the state. The log traffic is to a very large extent confined

to the district west of the Cascade Mountains where the greater portion of such traffic originates and is handled on branch lines. The log traffic makes little use of the extensive terminals within the state, the shippers in many instances providing their own terminal facilities. The rolling stock used in the handling of logs consists altogether of flat cars which are less costly than other types of equipment.

XII.

"Various exhibits were introduced by the associated log shippers and by the carriers to show the financial results from log transportation within the state during the year 1920, the most important of these exhibits being Associated Log Shippers Revised Exhibit No. 4 and the Great Northern Railway Company's Exhibit No. 24. These exhibits were decidely conflicting. Without attempting to pass upon the comparative merits of these exhibits, we find that Great Northern Exhibit No. 24 contains certain errors and improper assumptions, to-wit:

(a) In establishing the relation between the 1920 taxes and gross earnings, system non-operating revenues to the amount of $12,291,544 were omitted, the result being an unwarranted increase in the amount of taxes assigned to the log traffic.

(b) In listing the system taxes paid, income taxes to the amount of $3,508,928 were included, of which $643,101 were charged to the State of Washington.

(c) Owing to the fact that the log traffic is for the most part handled upon comparatively inexpensive branch lines; and to the fact that it makes practically no use of the costly terminals; and to the further fact that

the rolling stock used in the handling of same has a comparatively low cost, it seems unfair to assess against the log traffic its exact pro rata of taxes based on gross earnings. An assess (fol. 33½i) ment of approximately 50 per cent of its pro rata of taxes on such basis should be sufficient.

(d) The conclusions reached in Great Northern Exhibit No. 24 are to a certain extent based upon figures supplied by the carriers and shown in Associated Log Shippers' Exhibit No. 3, which figures were challenged by the Associated Log Shippers as being of doubtful correctness, and upon which point the carriers produced no additional evidence or information.

(e) Said Great Northen Exhibit No. 24 shows that during the year 1920 the log traffic within the state was handled by the four principal carriers at a loss of $110,629, while their intrastate traffic within the state earned a net profit of $3,284,579. Therefore, if carried to its logical conclusion, this exhibit shows that during the same year the interstate traffic handled within the state, must have incurred a loss of $17,241,385. This conclusion seems absurd when considered in the light of the testimony of the carriers that long haul traffic is more profitable than short haul traffic.

(f) The exhibit shows that during the year 1920 the four principal carriers within the state incurred a loss from log traffic of $110,629. According to our computation such log traffic during the year in question yielded a profit over the cost of operation, taxes and depreciation accounts, of at least $818,448.

XIII.

"In arriving at the net revenue from log traffic earned by the four principal carriers within the state during 1920, of $818,448, the following method was used:

Gross revenue from log transportation	$2,859,172	
Incidental freight revenue assigned to log transportation	56,232	
Total revenue		$2,915,404
Operating expense assigned to log transportation	$1,923,198	
Taxes assigned to log transportation	173,758	
Total expense		2,096,956
Total net		$ 818,448

"In arriving at the operating expense assigned to the log traffic, the cost of freight operation within the State of Washington was calculated upon the basis of the cost per thousand gross ton miles of handling all freight upon the combined systems of the four principal carriers, and in this manner the total cost of freight operation assignable to the State of Washington was found to be $38,678,870, which is equivalent to a unit operating cost of $5,321 per 1,000 revenue gross ton miles handled by the four principal carriers within the state during the year in question. On this basis the cost of handling the log traffic within the state during the year by such carriers was $1,923,198. The taxes assigned to the log traffic are one-half of those contended for by the car-

riers after the elimination (fol. 33½j) of income taxes. All the figures used in this calculation are contained in the annual reports filed with us by the carriers, or were taken from the exhibits supplied by the carriers in this case.

"XIV

"The present main track mileage of the four principal carriers within the State of Washington is 4,936 miles. The actual value of all the property owned within the state by such carriers, as shown by Great Northern Exhibit No. 25 (same being the minutes of the 1921 proceedings of the State Equalization Committee), is $294,360,243, of which $255,672,247 represents real property, while $38,687,996 represents rolling stock. The cost of the aforementioned property is unknown, valuation now in progress by the Interstate Commerce Commission being incomplete, but the Washington Railroad Commission found that the actual cost of 3,007 miles of main track within the state was approximately $50,000 per mile, which cost included terminals, rolling stock and all operating property of every kind. Upon the basis of a cost of $50,000 per mile, the property of the four principal carriers within the state would have a total cost of $246,800,000.

XV.

"For the purposes of estimating the approximate rate of return earned by the four principal carriers within the state from the log traffic during the year 1920, we will assume the value of the property of such carriers within the state which is in any way used or useful in connection with the log traffic, is $300,000,000, a greater sum

perhaps than the evidence will justify. Following the method of division as indicated by the carriers' exhibits, it is considered that not more than 75 per cent of such value, or $225,000,000 is assignable to the freight business with the state. During the year 1920 the gross ton miles of logs, hauled by the four principal carriers within the state, constituted 4.97 per cent of the total gross ton miles of revenue freight hauled within the state by such carriers. It is therefore considered that five per cent of that part of the value of the carriers' property assigned to freight service should represent the tentative rate base for use in determining the rate of return earned by the log traffic in 1920; this tentative rate base being $11,250,000.

XVI.

"Using the tentative rate base of $11,250,000 and the net revenue over operation, taxes and depreciation accounts, or $818,448, it is seen that during the year 1920 which was a period of excessively high operating cost, the log traffic within the state earned a net rate of return of 7.28 per cent which is in excess of the 6 per cent rate of return prescribed by the Interstate Commerce Commission under the Transportation Act of 1920 as a fair rate of return on the aggregate value of the property of the railroads as a whole, and a rate which the carriers have treated in this case as not fair.
(fol. 33½k.)

XVII

"There is no commodity movement in the United States which is similar or analogous to the movement of logs in the Pacific Northwest. The log traffic in this state is large in volume and it is practically a

continuous movement in trainload lots throughout the year. The lumber industry which utilizes logs as raw material, supplies the carriers with approximately 65 per cent of the outgoing traffic from this state. Due to the peculiar local conditions which surround the log traffic within this state, comparisons of log transportation rates in other states and decisions of tribunals involving log rates in such states are of little aid to us in this case. Neither is the log traffic fairly comparable with that of any other commodity transported within the State of Washington.

XVIII.

"That a fair, reasonable and uniform tariff to cover the transportation of logs within the State of Washington upon the lines of all carriers parties to this proceeding, is that shown in the order attached hereto. This tariff in our judgment will provide adequate compensation to the carriers and the rates specified therein are no greater than shippers should be called upon to pay. The rates which are now, and which have been, in effect were and are unduly discriminatory, preferential and lacking in uniformity. The revenue from such schedule is no criterion as to the revenue which might result from a uniform and nondiscriminatory tariff. The rates prescribed herein, are just, fair, reasonable and sufficient.

XIX.

"In order to test the workings of this tariff, it is provided that the same shall remain in effect during an experimental period of twelve months from the date it becomes effective, and if at the end of

such experimental period the tariff contained in the attached order is found to be oppressive to the carriers or to the log shippers, a rehearing may be had before this Department upon the matters involved in this order.

XX.

"The impossibility of accurately determining the cost of transporting any given commodity by a rail carrier is conceded by many traffic and statistical experts. A comparison of the widely different conclusions reached by experts of acknowledged ability and integrity who have presented exhibits in this case, demonstrates the difficulties of such a task. We realize that the calculations we have made and the conclusions we have reached differ from those of the experts on both sides of this controversy. We and our own experts, however, have had the benefit of all the exhibits and testimony in the case, and have sought to avoid errors pointed out during the progress of the hearing. While the difficulty of ascertaining with certainty the cost of transporting any given commodity in a past (fol. 33½1) operation is great, the difficulty of forecasting the cost is infinitely greater. Predictions can only be based upon past experiences and future probabilities in the light of all the facts. The volume of traffic moving is a controlling element. The fixed charges of a railroad remain fairly constant, and the operating expenses do not increase proportionately with increased traffic volume.

"If the rates we prescribe stimulate the log movement or the volume of traffic increases for any other reason ,these rates will increase the earnings of the carriers on this commodity.

"It is because of the impossibility of forecasting results with certainty that we have decided to prescribe a twelve months period of experimental operation under the new tariff.

"The rates we have fixed will constitute a material reduction to the shippers, and in view of the less expensive operation, and the reasonable assumption of increased volume of traffic, we believe they will yield a net revenue equal to that afforded by the existing rates, and in any event equal to the rate of return fixed by the Interstate Commerce Commission as fair and just on the traffic as a whole.

XXI.

"The Department finds that Northern Pacific Coast Freight Bureau local freight tariff No. 29, W. D. P. W. No. 65, referred to in finding III is unjust, unreasonable and more than sufficient and more than the traffic will bear, and will order that this tariff be cancelled and superseded by another tariff which shall carry the rates and provisions named in the order attached hereto.

XXII.

"The Department will prescribe in its order rates for the intrastate movement of logs within the State of Washington on a single car basis without prescribing a different train load rate. The rates to be named in the order are based upon both the single car and the trainload movement, and the Department has taken into consideration the fact that the movement is peculiarly in trainload lots of ten or more cars because of the methods of logging operations.

XXIII.

"In view of the fact that log flats, equipped with steel log bunks constitute safe, adequate and sufficient equipment for the prompt, safe and expeditious transportation of logs, we strongly recommend that the carriers, parties hereto, equip a reasonable number of log flats with steel bunks, the number so equipped bearing a proper relation to the volume of log traffic on the respective systems. The testimony shows that cars so equipped will permit of heavier loading, and hence yield a greater revenue to the carriers. The minimum load for cars not equipped with steel bunks should be 500 feet less than the minimum prescribed for cars so equipped and we will so order. The Department will direct that a rule be carried in the (fol. 33½m) tariffs of the carriers whereby a lower charge will be made on cars not equipped with steel log bunks.

XXIV.

"The present method of specifying the minimum load per car is inequitable and results in the assessment of excess freight charges against the shipper who upon an average loads more than the minimum per car. A more equitable method would be to designate an average carload minimum based on the number of cars tendered the carrier in any one shipment, and the Department will so order.

XXV.

"The promulgation of the rules designating an average carload minimum based upon the number of cars tendered the carrier in any one shipment will reduce the revenues of the carriers by an amount equal to the excess charges amounting to about

six per cent of the total charges or approximately $150,000 per year, under the scale of rates herein prescribed. We have taken this into consideration and have fixed the basic rate sufficiently high to earn that additional revenue, that is to say, we have prescribed a rate that will produce six per cent more revenue than we would have prescribed had we not changed the rule as to minimum load.

* * * * * * *

ORDER

"Wherefore it is ordered by the Department of Public Works of Washington that North Pacific Coast Freight Bureau local freight tariff No. 29, W. D. P. W. No. 65, now under suspension, be, and the same is hereby cancelled.

"It is further ordered, that the following named carriers, to-wit: Northern Pacific Railway Company, Great Northern Railway Company, Chicago, Milwaukee & St. Paul Railway Company, and the Oregon-Washington Railroad & Navigation Company, parties hereto, (fol. 33½n) and the said S. J. Henry, Agent, North Pacific Coast Freight Bureau, make, publish and file with this Department, effective on or before twenty (20) days from the date of service of this order, the following distance scale of rates for the intrastate transportation of soft wood logs, to-wit: cedar, cotton wood, fir, hemlock, larch, pine, poplar and spruce logs in carloads within the State of Washington in lieu of all distance and commodity rates for the intrastate transportation of such logs in carloads within the State of Washington, the same to remain in effect during an experimental period of twelve months from the effective

date thereof, or until the further order of this Department, and make, publish and file all tariffs, cancellations and changes necessary to conform to this order within the time aforesaid.

Scale of Rates

Distances	Rates in cents per 1,000 feet
5 miles or less	115
Over 5, not over 10 miles	125
Over 10, not over 15 miles	135
Over 15, not over 20 miles	145
Over 20, not over 25 miles	155
Over 25, not over 30 miles	165
Over 30, not over 35 miles	175
Over 35, not over 40 miles	185
Over 40, not over 45 miles	195
Over 45, not over 50 miles	205
Over 50, not over 55 miles	215
Over 55, not over 60 miles	225
Over 60, not over 65 miles	235
Over 65, not over 70 miles	245
Over 70, not over 75 miles	255
Over 75, not over 80 miles	265
Over 80, not over 85 miles	275
Over 85, not over 90 miles	285
Over 90, not over 95 miles	295
Over 95, not over 100 miles	305
Over 100, not over 105 miles	315
Over 105, not over 110 miles	320
Over 110, not over 115 miles	330
Over 115, not over 120 miles	340
Over 120, not over 125 miles	350
Over 125, not over 130 miles	360
Over 130, not over 135 miles	370
Over 135, not over 140 miles	380
Over 140, not over 145 miles	390
Over 145, not over 150 miles	395

"It is further ordered that the carriers, parties hereto, shall carry a rule in their tariffs applicable to the intrastate movement of logs in carloads within the State of Washington reading substantially as follows:

'Where cars not equipped with steel log bunks are furnished shippers, the charge applicable to each carload will be upon the basis of (fol 33½o) the rates named in this tariff, less a deduction of fifty (50) cents per car.'

"It is further ordered that the carriers provide in their tariffs a minimum load of seven thousand (7,000) feet per each car equipped with steel log bunks and sixty-five hundred (6,500) feet per each car not so equipped, to be applied in all cases of single car shipments, but where more than one car is tendered or forwarded in any one shipment, that the minimum load of seven thousand (7,000 ft.) feet be averaged for the entire number of cars equipped with steel log bunks in any one shipment, and a minimum of sixty-five hundred (6,500) feet shall be averaged for the entire number of cars not so equipped in any one shipment. This rule to apply in all cases except where existing tariffs provide a minimum of less than seven thousand (7,000 ft.) feet because of peculiar type of car furnished, in which cases the existing minima shall be maintained. If any controversy arises in relation to the minima to be applied under this exception, the Department will take the necessary steps to determine the same.

"It is further ordered that the carriers, parties hereto, terminate any and all contracts naming log rates insofar as they may

differ from the rates, rules, regulations or charges prescribed herein."

* * * * * * *

February 16, 1922, the plaintiffs in error filed their joint and several petition in the Superior Court of the State in and for Thurston County, for a writ of review, for the purpose of having the reasonableness and lawfulness of this order inquired into and determined. (Record pp. 32-48, f. 34-62.) This was puursuant to the practice prescribed by the Washington statutes for the review of such orders. (Sec. 10428 Remington Comp. Stat.) In this petition numerous errors in the proceedings and order of the Department were assigned, including the making of many findings without evidence and contrary to the evidence, the determination of the costs of the log transportation upon the basis of the average per ton mile cost upon the combined systems of the four carriers, the use of the alleged combined valuations of the properties of the four carriers as a rate base, and, in general, the treatment of the four carriers as a single line for the purpose of determining what would be a reasonable rate, the failure to include as a proper charge against the log transportation a proportional amount of

the federal income taxes paid, the failure to assign against the log traffic its proper proportion of other taxes; and it was specifically alleged that under the order the property of each of the plaintiffs in error would be taken without due process of law, in violation of the Fourteenth Amendment to the Constitution of the United States, and in violation of the constitution of the State of Washington." (Record p. 46, f. 58.)

The writ of review was duly issued; and the Department having returned the record of its proceedings conformably to the statute (Section 10428 Remington's Comp. Stat.), the superior court, after hearing, affirmed the order of the Department (Record p. 50-1, f. 66-68.) From this judgment of affirmance the plaintiffs appealed to the Supreme Court of the State.

Paragraph 2 of Rule VIII of the rules of that Court relative to the preparation of briefs, provides:

> "Each error relied on shall be clearly pointed out, and separately discussed under appropriate designated headings. Where there are several assignments presenting the same general questions, they may be discussed together. * * "
>
> 124 Wash. XLVII.

Pursuant to this rule, which is the only pro-

vision for assignments of error in that Court, each of the plaintiffs in error filed a brief pointing out as erroneous and in conflict with the Fourteenth Amendment to the Federal Constitution, the acts of the Departments hereinafter considered.

July 18, 1923, that Court filed its opinion sustaining the action and order of the Department (Record p. 52-62, f. 146-161.)

In what must be considered as the prevailing opinion, although but three of the members concurred therein, three others concurring only in the result and three dissenting, the Court held:

(a) That objection to the act of the Department in basing its findings as to the cost of transportation upon an average of the transportation costs of the four roads, is removed if the rate thus determined is compensatory.

(b) That the Department proceeded upon "a fundamentally right basis in determining that the costs of the entire system should be taken into consideration in determining the cost in the State of Washington *since interstate and intrastate commerce are interdependent upon each other.*" (italics supplied.)

(c) That income taxes were properly omitted in determining the net income of the carriers

because the Interstate Commerce Commission had fixed 5.75 per cent as a fair return to railroad companies under the Transportation Act, and that the rate fixed by the Department, which, it was stated, would provide a 6 per cent return, was sufficient to provide a 5.75 per cent return over and above the income taxes.

(d) That the action of the Department in providing for a penalizing lower rate where patent bunks were not furnished by the carrier, was authorized by the Washington statutes.

(e) That the remaining errors assigned involved questions of fact, as to which the findings of the Department were controlling unless "arbitrarily reached without full and due consideration of all the facts or have been arrived at upon a manifestly wrong basis." And after citing and quoting Washington and other decisions as supporting this rule of law, the Court continued:

> "We find that there is proper evidence to support the order of the board of public works. The Court has not the authority or right to substitute itself for the rate making body or attempt to perform such functions. * * Neither is it within the province of the Court to consider the weight of the evidence or wisdom of the order."

A further justification of the affirmance of the

order because of its limited duration, was suggested:

> "The order complained of provides for an experimental period and if the tariff is found by actual trial to be oppressive or confiscatory a rehearing may be had at any time before the board of public works."

And after denying a petition for rehearing the Court, November 20, 1923, entered judgment affirming the judgment of the Superior Court. (Record p. 63, f. 163.)

The present writ of error is sued out for the correction of this judgment.

Upon the record and under the assignment of errors two distinct questions arise under the due process clause of the Fourteenth Amendment of the Constitution of the United States; one as to whether the procedure was violative of that clause; the other as to whether the order took the properties of the plaintiffs in error in violation of that provision, regardless of the regularity of the procedure as to form, because the rate prescribed is confiscatory.

ASSIGNMENT OF ERRORS

The Supreme Court of the State of Washington erred in its decision in this action in the following particulars:

1. In holding and deciding that the burden of proof was upon plaintiffs in error to show that the rates and charges applicable to transportation of logs was not unjust, unreasonable and unjustly discriminatory and in affirming the order of the Department of Public Works in placing such burden of proof upon the plaintiffs in error.

2. In affirming the order of the Department of Public Works of the State of Washington notwithstanding the said order was based upon findings of fact not supported by any evidence but which were made arbitrarily and in disregard of the evidence adduced in the proceeding before it.

3. In refusing to reverse and set aside the order of the Department of Public Works prescribing a schedule of rates for the transportation of logs in the State of Washington for the reason that said Department, in determining the rates prescribed in its said order, ignored the evidence as to the value of the property employed by the several carriers in such log transportation and the evidence of the cost of such transporta-

tion to the several carriers; and arbitrarily based its findings and order establishing a schedule of rates (a) upon an assumed value of the combined systems of the plaintiffs in error in the State of Washington, (b) upon the assumed value of the combined properties of said plaintiffs in error used or useful in the transportation of logs; and (c), upon an assumed average cost of such log transportation upon the combined systems of the said plaintiffs in error.

4. In affirming the order of the Department of Public Works of the State of Washington prescribing a schedule of rates for the transportation of logs in the State of Washington, for the reasons:

(a) That said Department of Public Works, in fixing said rates, arbitrarily failed and refused to consider the value of the separate properties of the several plaintiffs in error employed in said transportation;

(b) That said Department of Public Works, in fixing said rates, arbitrarily failed and refused to consider the separate operating costs of such log transportation to the respective plaintiffs in error.

(c) That said Department of Public Works arbitrarily ordered each and all of the said plaintiffs in error to adopt and observe a schedule of

log rates in the State of Washington which was concededly not based upon the separate valuation, the property of said several plaintiffs in error employed in such transportation or upon the operating costs of such transportation to said several plaintiffs in error; but which were based upon an assumed valuation of the combined properties of all of said plaintiffs in error employed or used in such transportation of logs and upon an assumed average operating cost of such transportation to all of the said plaintiffs in error.

5. In affirming the said order of the Department of Public Works, for the reason that the said Department arbitrarily and improperly apportioned ad valorem taxes to the property devoted to the transportation of logs and refused to charge such transportation with any proportion of the federal taxes, including the income tax, which the said plaintiffs in error were respectively required to pay.

6. In affirming the order of the Department of Public Works, for the reason that the said order prescribes a schedule of rates for the transportation of logs which is insufficient to pay the cost to the several plaintiffs in error of such transportation, the ratable proportion of public taxes which should be charged against such transportation, and a fair or any return upon

the value of the property of the several carriers employed in such transportation.

7. In affirming the order of the Department of Public Works canceling the schedule of advance rates applicable to the transportation of logs filed by the said plaintiffs in error respectively, which schedule is designated as "North Pacific Coast Freight Bureau Local Freight Tariff No. 29, W. D. P. W. No. 65," for the reason that said schedule prescribed rates no higher than said plaintiffs in error and each of them were and are entitled to for the transportation of logs.

That by reason of the foregoing matters the said plaintiffs in error respectively were each deprived of their property without due process of law and denied the equal protection of the law in violation of the Fourteenth Amendment to the Constitution of the United States.

8. That the said Supreme Court of the State of Washington failed and refused to exercise an independent judgment upon matters material to a determination as to whether the rates for the transportation of logs prescribed by the order of the Department of Public Works were confiscatory and thereby denied to the said plaintiffs in error and to each of them the benefit

of that judicial review of said order required by the due process clause of the Fourteenth Amendment to the Constitution of the United States.

9. That the said Supreme Court of the State of Washington held that the rates for intrastate transportation of logs prescribed by the Department of Public Works were properly based upon a consideration of the operation of the respective plaintiffs in error in interstate transportation; and that thereby said Court held and determined that intrastate rates could be, and that the rates for the transportation of logs in the State of Washington were, properly based upon a consideration of commerce conducted by the respective plaintiffs in error among the several states. That according to said ruling the said rates prescribed by the Department of Public Works of the State of Washington for the transportation of logs by the respective plaintiffs in error are in violation of the provision of Section 8 of Article I of the Constitution of the United States that Congress shall have power to regulate commerce with foreign nations and among the several states and with the Indian tribes.

ARGUMENT

I.

WHAT DUE PROCESS OF LAW REQUIRES AS TO PROCEDURE

(a) The right of a common carrier to collect just, fair, reasonable and sufficient charges for its services, is expressly authorized by the statute of Washington and is a property right.

Section 10345, *Remington's Compiled Statutes of Washington,*

Chicago, M. & St. P. Ry. Co. v. Minnesota, 134 U. S. 418, 457-8.

(b) A reduction of rates or other regulation affecting property rights of public service companies by a board or tribunal vested with such power by state laws is the act of the state within the meaning of the Fourteenth Amendment prohibiting the deprivation of life, liberty or property without due process of law and the denial of the equal protection of the law.

Raymond v. Chicago Traction Company, 207 U. S. 20, 35-6.

Grand Trunk Ry. v. Indiana R. R. Com., 221 U. S. 400, 403.

Louis. & Nash. R. R. Co. v. Garrett, 231 U. S. 298, 318

Bluefield W. W. & Imp. Co. v. Pub Serv. Com., 262 U. S. 679, 683.

Central of Georgia Ry. Co. v. R. R. Com., 161 Fed. Rep. 925, 965-6.

Oklahoma Operating Co. v. Love, 252 U. S. 331, 335.

Nor is it material that the act complained of may be an abuse or in excess of the power conferred by the State.

Home Tel. & Tel Co. v. Los Angeles, 227 U. S. 278, 287, et seq.

Wilmington City Ry. Co. v. Taylor, 198 Fed. Rep. 159, 169, 179 et seq.

(c) What constitutes due process of law within the meaning of the Amendment, in any case or proceeding, varies with the nature of the particular case or proceeding.

> "In determining whether or not due process of law has been denied regard must always be had to the character of the proceeding involved for the purpose of determining what the practice at common law was and what the practice in this country has been in like cases."

Crane v. Hahlo, 258 U. S. 142, 147.

Twining v. New Jersey, 211 U. S. 78, 100, et seq.

Davidson v. New Orleans, 96 U. S. 97, 107 (Opinion of Justice Bradley).

Kentucky Railroad Tax Cases, 115 U. S. 321, 331.

Cooley, Const. Lim. sec 356.

Probably no more definite rule can be laid down.

In determining whether the procedure of the Department of Public Works in the present case was violative of the due process clause, it is therefore essential to consider the character of the power and function exercised by that board and for this purpose to note the material provisions of the Washington statute.

The statute provides:

> "All charges made for any service rendered or to be rendered in the transportation of persons or property, or in connection therewith, by any common carrier, or by any two or more common carriers, shall be just, fair, reasonable and sufficient."

Section 10345, Remington's Comp. Stat.

Every common carrier shall file with the Commission, print and keep open for public inspection, schedules showing the rates, fares, charges and classifications for the transportation of persons and property within the state. (Section 10350, Rem. Comp. Stat.)

No common carrier shall charge, demand, collect or receive a greater or less or different compensation for transportation of persons or property, or for any service in connection therewith, than the rates, fares and charges applicable to such transportation as specified in such

schedules. (Section 10354, Rem. Comp. Stat.)

Whenever the Commission shall find, after hearing had upon its own motion or upon complaint, that the rates, fares, or charges of any common carrier are unjust, unreasonable, unjustly discriminatory, unduly preferential, or in anywise illegal, or insufficient to yield a reasonable compensation for the service rendered, it shall determine the just, reasonable or sufficient rates, fares, charges, regulations or practices to be thereafter observed and enforced and fix the same by order. (Sec. 10389, Rem. Comp. Stat.)

Complaint may be made by the Commission of its own motion or by any person or corporation setting forth any act or thing done or omitted to be done by any public service corporation in violation, or alleged violation, of any provision of law, or order or rule of the Commission; and upon such complaint the Commission shall have power, after notice and hearing, by order, to correct the abuse complained of by establishing such uniform rates, charges, rules, regulations or practices, in lieu of those complained of, as shall be found reasonable, remunerative, nondiscriminatory, legal and fair. (Sec. 10422, Rem. Comp. Stat.)

At the time fixed for the hearing the complain-

ant and the party complained of shall be entitled to be heard and introduce such evidence as he or it may desire. The commission shall issue process to compel the attendance of all necessary witnesses. At the conclusion of the hearing the Commission shall make and render findings of fact concerning the subject of the inquiry and enter its order therein, a copy of which must be served on the party complained of. Unless otherwise provided such order takes effect twenty days after the service thereof. A full and complete record of all proceedings had and of all testimony must be taken by a stenographer; and in case of an action to review any order, a transcript of the testimony, together with all exhibits introduced, and of the record and proceedings in the cause, shall constitute the record of the Commission. (Sec. 10423, Rem. Comp. Stat.)

Whenever any public service company shall file with the Commission any schedule, classification, rule or regulation, the effect of which is to increase any rate, fare, charge, rental or toll, the Commission may, upon its own motion or upon complaint, upon notice, enter upon a hearing with respect thereto and as to the reasonableness and justice thereof; and it may,

pending such hearing, suspend such schedules for a limited period.

If the order of the Commission at the conclusion of the hearing is adverse to the proposed increase, it cannot be superseded pending a review thereof by the courts. (Sec. 10424, Rem. Comp. Stat.)

If any complainant or public service company affected by any order of the Commission deems it contrary to law, he or it may, within 30 days from the service of such order, apply to the superior court for a writ of review for the purpose of having the reasonableness and lawfulness of such order inquired into and determined. Such writ shall direct the Commission to certify its record in the case to the court, which is to hear the case without a jury, "on the evidence and exhibits introduced before the Commission and certified to by it. Upon such hearing the superior court shall enter judgment either affirming or setting aside the order of the Commission." If the court shall reverse an order for failure of the Commission to receive testimony properly proffered, it shall remand the case to the Commission with instructions to receive such testimony. And it may, in its discretion, remand any cause reversed by

it to the Commission for further action. (Sec. 10428, Rem. Comp Stat.)

Any order of the Commission, except one disallowing a proposed increase in rates, fares or charges, may be superseded pending the review thereof by the giving of a proper bond. (Sec. 10429, Rem. Comp Stat.)

An appeal from the judgment of the superior court in such proceeding to the Supreme Court of the State, is authorized. (Sec. 10430, Rem. Comp. Stat.)

> "In all actions between private parties and public service companies involving any rule or order of the Commission, and in all actions for the recovery of penalties provided for in this act, or for the enforcement of orders or rules issued and promulgated by the Commission, the said orders and rules shall be conclusive unless set aside or annulled in a review as in this act provided."
>
> Sec. 10448, Rem. Comp Stat.

The Supreme Court of Washington, construing the section last quoted, has held that "the only remedy a complaining public service company may employ to call in question an order of the public service commission is by a writ of review within the time and in the manner specified in the statute." This rule, however, being subject to the qualification that if the order is

void, it may be attacked at any time, even collaterally.

Willapa Power Co. v. Pub. Serv. Com., 110 Wash. 193, 195.

And see: *State ex rel. R. R. Com. v. O. R. & N. Co.*, 68 Wash. 160, 168.

State ex rel. R. R. Com., v. G. N. Ry. Co., 68 Wash. 257, 265.

State ex rel. C. M. & St. P. Ry. Co. v. Pub. Serv. Com., 94 Wash. 274, 285.

And in the hearing on such review the court is, by section 10427 above referred to, limited to the evidence and exhibits introduced before the Commission and certified by it to the court in response to the writ.

State ex rel. O. R. & N. Co. v. R. R. Com., 52 Wash. 17, 27-8.

It will be noted from the foregoing provisions:

First: That the legislature has itself prescribed, although in general terms, what the rates or charges shall be; they "shall be just, fair, reasonable and sufficient."

Second: That the initiating of the rates which are to be so just fair, reasonable and sufficient, is a function to be exercised by the carriers or public utilities.

Third: That the power of the Commission, and of the Department as its successor, is confined, in the first instance, to a power to inves-

tigate upon complaint, either by itself or by interested parties, the question of the reasonableness, justness, legality and sufficiency of those rates which a utility has embodied in a schedule duly filed. For such purposes the Commission must order a hearing, giving the interested utility not less than ten days notice, and take testimony, including such competent evidence as the utility may offer, upon which testimony, which must be made of record, its determination must be based.

Fourth: Only when the Commission has found, *after a hearing,* that the rates, fares or charges are unjust, unreasonable, unjustly discriminatory, violative of the law, or insufficient, is it authorized to determine the just, reasonable and sufficient rates, fares or charges to be thereafter observed and enforced, and "fix the same by order."

(1) *Under these provisions the power exercised by the Department of Public Works in fixing a rate, is a quasi-judicial power.*

The establishing of rates to be charged in the future is a legislative act.

Interstate Com. Com. v. C. N. O. & T. P. Ry. Co., 167 U. S. 479, 499.

Prentis v. Atlantic Coast Line, 211 U. S. 210, 226.

Louis. & Nash. R. R. C. v. Garrett, 231 U. S. 298, 305.

It is a power which, under the Washington constitution, the legislature could not delegate to an administrative tribunal.

Carstens v. De Sellem, 82 Wash. 643, 650.

State ex rel. C. M. & St. P. Ry. Co. v. Pub. Serv. Com., 94 Wash. 274, 279.

Wichita R. R. & L. Co. v. Pub Util. Com., 260 U. S. 48, 58-9.

And it is evident from the statutory provisions referred to that such was not the purpose of the legislature. The primary power conferred upon the Commission is to determine whether rates initiated by the utilities by filing schedules, conform to the legislative requirement that they should be just, fair, reasonable and sufficient. If after due hearing the Commission shall find that they do not so conform, it becomes its duty to determine the rates that do conform and "fix the same by order." This is not a delegation of a power to make a rate, but it is a delegation of power to determine what rate fulfills the condition prescribed by the act of the legislature and is therefore that which the legislature has ordained. It is an administrative power which can be rightfully delegated.

State ex rel. C. M. & St. P. Ry Co. v. Pub. Serv. Com., 94 Wash. 274, 279.

Field v. Clark, 143 U. S. 649, 693-4.

"This law * * establishes, and thenceforth assumes, the existence of rates, charges, classifications, and services discoverable by investigation, but undisclosed, which are exactly reasonable and just. It commits to the Railroad Commission the duty to ascertain and disclose that particular rate, charge, classification, or service. The law intends that there is only one rate, charge, or service that is reasonable and just. When the order of the Commission is set aside by the Court, it is because this reasonable and just rate, charge, classification or service has not yet been correctly ascertained. When the order of the Commission has been rescinded or changed by the Commission because of changed conditions, it is because there is a new reasonable rate to be ascertained and disclosed, applicable to such new conditions and fixed by force of law immediately when the new conditions come into existence. But the theory and the mandate of the law is that this point always exists under any combination of circumstances and is always discoverable, although not always discovered. Until it is discovered and made known the former rates and service prevail. The order of the commission is prima facie evidence that the rate, charge or service found and fixed by it is the particular rate, charge or service declared by the legislature in general terms to be lawful and to be in force. If it were conceded that the Commission had power or discretion to fix one of several rates, either of which would be just and reasonable, it would be hard to say that

this was not a delegation of pure legislative power to the commission."

Minneapolis, St. P. & S. Ste. M. Ry. Co. v. R. R. Com., 136 Wis. 146, 167-8;

116 N. W. Rep. 905, 911.

Waukesha Gas & Elec. Co. v. R. R. Com., 181 Wis. 281, 289-90; 194 N. W. Rep. 846, 849.

Detroit & M. Ry. Co. v. Mich. R. Com., 171 Mich. 335, 346; 137 N. W. Rep. 329, 333.

State ex rel. Rhodes v. Pub. Serv. Com., 270 Mo. 547, 580-2; 194 S. W. Rep. 287, 296.

This quotation correctly declares the fundamental theory of the Washington Public Service Commission Act and the functions of the Department thereunder. If doubt could exist as to this it would be removed by consideration of the provisions of Section 10433 Remington's Comp. Stat., for awarding reparation in case of excessive or exorbitant charges, a provision which contemplates that a charge collected pursuant to a schedule duly filed and unchallenged at the time of the collection, may nevertheless be in excess of the reasonable charge authorized by the statute.

This limited power of determining and declaring the just, fair, reasonable and sufficient rate which the legislature has prescribed, is conditioned upon a determination, after hearing, that the existing rate is unjust, unreasonable, unjust-

ly discriminatory, unduly preferential, illegal or insufficient. Speaking of an analogous provision in the Public Utilities Commission Act of Kansas, this Court said:

> "The power (to fix and order substituted new rates for existing rates) is expressly made to depend on the condition that after full hearing and investigation the commission shall find existing rates to be unjust, unreasonable, unjustly discriminating or unduly preferential."
>
> *Wichita R. R. & L. Co. v. Pub. Util. Com.*, 260 U. S. 48, 58.

The foregoing review and analysis of the Washington statute determines that the particular proceeding to be considered, and with reference to which the requirements or limitations imposed by the due process clause of the Fourteenth Amendment are to be determined, is, primarily, an investigation by an administrative body as to the justness, fairness, reasonableness and sufficiency of an existing rate or rates. Such investigation would, of necessity, include a determination as to what was the just, fair, reasonable and sufficient rate. Any further hearing for that purpose would be superfluous. And the power to declare and fix such rate or rates is supplemental to the primary power of investigation and determination as to the existing rate or rates.

That the functions thus imposed upon the Department of Public Works by the Statutes of Washington are judicial in their nature and that the Department exercises quasi-judicial powers in the performance thereof, has been repeatedly determined by the Washington Supreme Court.

In *State ex rel. G. N. Ry. Co. v. R. R. Com.*, 60 Wash. 218, 223, the Court, while holding that the railroad commission was not a purely judicial tribunal, said:

> "It acts in a sense judicially when it renders the decisions and makes its orders upon a hearing."

Also: "The hearing before the commission is viewed by the reviewing court very much as any other trial in a lower court is reviewed by a reviewing court. There must be some evidence to support the determination of the tribunal hearing the matter, or its determination cannot stand when properly challenged in the reviewing court. Indeed, this judicial nature of the hearing before the commission, in view of the want of opportunity to produce evidence in the courts touching the reasonableness of the orders, is what really saves the law from being unconstitutional." Id. p. 232.

In *State ex rel Pub. Serv. Com. v. Skagit River T. & T. Co.*, 85 Wash. 29, 37, it said:

> "Although said section 99 (section 10448 Rem. Comp. Stat.) provides that, in all actions between private parties and public

service companies involving any order of the commission, or for the enforcement of the orders or rules issued by the commission, the said orders and rules shall be conclusive unless set aside or annulled in a review as in that act provided, nevertheless the commission in said proceedings was acting quasi-judicially, and even a court of record which enters a void judgment does not bind the parties thereto * * ."

And see: *State ex rel. O. R. &. N. Co. v. R. R. Com.*, 52 Wash. 17, 31-2.

State ex rel. R. R. Com. v. O. R. & N. Co., 68 Wash. 160, 168.

State ex rel. C. M. & St. P. Ry. Co. v. Pub. Serv. Com., 94 Wash. 274, 280.

So far as these rulings involve a construction of the Washington statute they are, of course, controlling.

Nor are these rulings inconsistent with the decisions of this Court.

In *Chicago Junction Case*, 264 U. S. 258, 264-5, the Court said:

> "Congress by using the phrase 'whenever the Commission is of opinion, after hearing,' prescribed quasi-judicial action."

This is the phraseology of the Washington statute.

In *Interstate Com. Com. v. Louis. & Nash. R. R.*, 227 U. S. 88, 91, a hearing and order respecting the reasonableness of rates, is designated as "quasi-judicial."

And see: *State ex rel. O. R. R. & N. Co. v. Fairchild*, 224 U. S. 510, 526-7.

In *Chicago, M. & St. P. Ry. Co. v. Minnesota*, 134 U. S. 418, 457-8, the Court said:

"It is provided that all charges made by a common carrier for the transportation of passengers or property shall be equal and reasonable. Under this provision, the carrier has a right to make equal and reasonable charges for such transportation.

* * * * *

The question of the reasonableness of a rate of charge for transportation by a railroad company, involving as it does the element of reasonableness both as regards the company and as regards the public, is eminently a question for judicial investigation, requiring due process of law for its determination. If the company is deprived of the power of charging reasonable rates for the use of its property, and such deprivation takes place in the absence of an investigation by judicial machinery, it is deprived of its property and thus, in substance and effect, of the property itself, without due process of law and in violation of the constitution of the United States."

And see: *Interstate Com. Com. v. C. N. O. & T. P. Ry. Co.*, 167 U. S. 479, 499.

Love v. A. T. & S. F. Ry. Co., (C. C. A.) 185 Fed. Rep. 321, 327.

Sabre v. Rutland R. Co., 86 Vt. 347, 367; 85 Atl. Rep. 693, 701.

Janvrin v. Revere Water Co., 174 Mass. 514, 516-20 55 N. E. Rep. 381, 382-3.

Under the statute of Washington the courts are authorized to review the orders of the de-

partment upon that evidence only which has been offered before the administrative board. And if that review, involving, as it does, the weighing of testimony, determination of the facts and exercise of discretion in rendering the decision, is judical in its nature, as it clearly is, the performance of the same function with respect to the same evidence by the Department of Public Works must be at least quasi-judicial in character.

> "The duty of the courts in the premises is not essentially different from that of the commissions."
>
> *Detroit & M. Ry. Co. v. Mich. R. Com.*, 171 Mich. 335, 346; 137 N. W. Rep. 329, 333.

The proceeding before the Department being quasi-judicial the plaintiffs in error were entitled to those protective requirements or limitations which the Fourteenth Amendment imposes upon proceedings of that character by administrative boards. As applied to such proceedings it requires a hearing, of which reasonable notice must be given to the party whose rights are the subject of inquiry and at which such party may be heard and be given the opportunity to introduce evidence.

> "In the comparatively few cases in which such questions have arisen it has been distinctly recognized that administrative orders,

quasi-judicial in character, are void if a hearing was denied; if that granted was manifestly unfair; if the finding was contrary to the indisputable character of the evidence * * ; or, if the facts found do not, as a matter of law, support the order made."

Interstate Com. Com. v. Louis. & Nash. R. R., 227 U. S. 88, 91.

Chicago Junction Case, 264 U. S. 258, 265.

And see: *State ex rel. O. R. & N. Co. v. Fairchild*, 224 U. S. 510, 524, et seq.

U. S. v. B. & O. S. W. Ry. Co., 226 U. S. 14, 20.

New York & Queens Gas Co. v. McCall, 245 U. S. 345, 348-9.

Wilmington City Ry. v. Taylor, 198 Fed. Rep. 159, 169 et seq.

Atlantic Coast Line v. North Carolina Corp. Com., 206 U. S. 1, 20.

U. S. v. Kinkead, 248 Fed. Rep 141, 144.

(2) *A hearing upon notice with opportunity to introduce competent evidence, is required by the due process clause, even if the power exercised by the Department be considered legislative in character.*

If the Court should be of opinion that the proceedings before the Department cannot be considered as quasi-judicial, as held by the Washington Court, the conclusion that the due process clause requires a hearing upon notice

and with opportunity to the carrier to introduce competent testimony, is not changed. The question upon such assumption requires consideration, first, as to whether such constitutional limitations are applicable as a general proposition to the fixing of rates by an administrative body; and, second, if they are not so generally applicable, are they made applicable to such action under the Washington statute by virtue of the provisions making the orders of the Department conclusive except in a proceeding to review such orders in which the Court is limited to a consideration of the testimony offered at the proceeding before the administrative board and by it certified to the Court.

First. In *Chicago, M. & St. P. Ry. Co. v. Minnesota,* 134 U. S. 418, the Court held that a statute which made no provision for a hearing and provided no opportunity for the carrier to offer testimony, but made the rate order of the State Commission conclusive, was violative of the due process clause of the Fourteenth Amendment and void.

In *San Diego Land Company v. National City,* 174 U. S. 739, 748, the Court distinguished the *Minnesota Case,* supra, from the case then before it, saying:

> "That case involved the constitutionality of a statute of Minnesota empowering a commission to fix the rate of charges by railroad companies for the transportation of property. The Supreme Court of the State held that it was intended by the statute to make the action of the commission final and conclusive as to rates, and that the railroad companies were not at liberty, in any form or at any time, to question them as being illegal or unreasonable. This Court said: 'This being the construction of the statute by which we are bound in considering the present case, we are of opinion that, *so construed*, it conflicts with the constitution of the United States.'
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> * * * * *
>
> What this Court said about the statute can have no application to the present case unless it be made to appear that the constitution and laws of California invest the municipal authorities of that State with power to fix rates arbitrarily, without investigation, and without permitting the corporations or persons affected thereby to make any showing as to rates to be exacted or to be heard at any time or in any way upon the subject."

And after showing by quotations from the decisions of the California Supreme Court and reference to the California constitution that notice was provided, a fair investigation required and arbitrary action prohibited in fixing such rates, it was held that the proceeding was not violative of the due process provision.

In *Louisville & Nash. R. R. Co. v. Finn*, 235 U. S. 601, 606, it was said:

> "In cases arising under the Interstate Commerce Act, * * it has been repeatedly held by this Court that an administrative order made indisputably contrary to the evidence, or without evidence, must be deemed to be arbitrary, and therefore subject to be set aside. * * It is contended that the 'due process' provision of the Fourteenth Amendment imposes a like rule of procedure upon the states with respect to their exercise of the legislative power of ratemaking.
>
> We find it unnecessary to pass upon this question."

And so in *Vandalia R. R. Co. v. Pub. Serv. Com.*, 242 U. S. 255, 260.

But in *New York & Queens Gas Co. v. McCall*, 245 U. S. 345, 348-9, on a writ of error to the Supreme Court of New York in an action to review an order of the Public Service Commission of that State requiring the utility to extend its gas main and service pipes, the Court said:

> "While in such cases as we have here this Court is confined to the federal question involved and therefore has not the authority to substitute its judgment for that of an administrative commission as to the wisdom or policy of an order complained of, and will not analyze or balance the evidence which was before the Commission for the purpose of determining whether it preponderates for or against the conclusion arrived at, yet it will, nevertheless, enter upon such examina-

tion of the record as may be necessary to determine whether the federal constitutional right claimed has been denied, *as in this case, whether there was such want of hearing or such arbitrary or capricious action on the part of the Commission as to violate the due process clause of the constitution.*" (italics supplied)

And that in such proceedings the due process clause of the federal constitution requires notice, a hearing and opportunity to offer evidence has been held by United States district courts and State Supreme courts:

See: *Wilmington City Ry. Co. v. Taylor,* 198 Fed. Rep. 159, 169, et seq.

Washington P. & C. Ry. v. Mayruder, 198 Fed. Rep. 218, 221-2.

Central of Georgia Ry. v. Georgia R. R. Com., 215 Fed. Rep. 421, 423-7.

"It is claimed that the commissioner is vested with authority to prevent defendant from putting the new rates in effect by section 472 of the charter. That section does not provide for any hearing, or for the issuance of any process or other form of notice to the company, or for any opportunity to the company to offer evidence either before the commissioner or any other body or tribunal. In so far, therefore, as this provision is construed as authorizing the commissioner arbitrarily to fix and determine the rate to be charged by the defendant, it is unconstitutional, as violative of the due process of law provision in the constitution."

City of New York v. Citizens Water Supply Co., 189 N. Y. Sup. 929, 930.

"An administrative tribunal charged with the duty to determine a given matter must accord a hearing to parties in interest."

Appeal of Connecticut Co., 89 Conn. 528, 534; 94 Atl. Rep. 992, 994.

And see: *Spring Valley Water Works v. San Francisco*, 82 Cal. 286, 305-9; 22 Pac. Rep. 910, 914-15.

San Diego Water Co. v. City of San Diego, 118 Cal. 556, 575-6; 50 Pac. Rep. 633, 639-40.

The fact that the legislature itself could pass an act prescribing rates without a notice or hearing and that such procedure would not be violative of the due process clause, does not meet the argument that an administrative board vested with power to determine what is the just, fair, reasonable and sufficient rate which the legislature has prescribed, is required by the provision of the federal constitution to give notice and afford an adequate hearing.

See: *Londoner v. Denver*, 210 U. S. 373, 385-6.

Turner v. Wade, 254 U. S. 64, 67-8.

State v. Louisville & N. R. Co., 62 Fla. 315, 366-7; 57 So. Rep. 175, 192.

"The legislature itself can fix a rate without providing means in the act itself for a judicial review of the fact or reasonableness, but it could not delegate so thoroughgoing a power to the Commission."

State v. Pub. Serv. Com., 270 Mo. 547, 582; 194 S. W. Rep. 287, 296.

The legislature is a coordinate branch of the government representing and exercising in its sphere, the sovereignty of the people; and is, "for political reasons of manifest force, wholly exempt in all its proceedings from any legal process or judicial control." It may therefore enact legislation prescribing rates without notice or a hearing and such legislation is valid so long as it is not in fact confiscatory. But it cannot delegate this immunity to any officer or board.

Spring Valley Water Works v. San Francisco, 82 Cal. 286, 310-11; 22 Pac. Rep. 910, 915.

Davis v. Mayor, 1 Duer, 451, 494-5.

No good reason appears why the due process requirements that there should be a notice and adequate hearing—that the proceedings should not be arbitrary—do not apply to and control such administrative proceedings.

(a) The right of the carrier to collect just, fair, reasonable and sufficient charges, is a property right within the protection of the constitutional amendment.

Chicago, M. & St. P. Ry. Co. v. Minnesota, 134 U. S. 418, 457.

Minnesota Rate Cases, 230 U. S. 352, 434; and cases cited.

(b) The essential purpose of the constitutional amendment was to prohibit the states

from depriving the citizens of life, liberty or property by arbitrary action or without that due hearing which is essential to the protection of private rights against such action.

Davidson v. New Orleans, 96 U. S. 97, 107.

Hurtado v. California, 110 U. S., 516, 535-6.

Hagar v. Reclamation District, 111 U. S. 701, 707-8.

"These words (of the due process clause) shield the citizens rights to life, liberty and property from the exercise of arbitrary governmental power."

Le Clair v. White, 117 Me. 325, 338; 104 Atl. Rep. 516, 518.

(c) The limitations extend to all agencies through which the state acts, and extend to the action taken through the administrative rate regulating boards.

Chicago, B & Q. R. Co. v. Chicago, 166 U. S. 226, 233.

Grand Trunk Ry. v. Indiana R. R. Com., 221 U. S. 400, 403.

Louis & Nash. R. R. Co. v. Garrett, 231 U. S. 298, 318.

Oklahoma Operating Co. v. Love, 252 U. S. 331, 335.

Bluefield W. W. & Imp. Co. v. Pub. Serv. Com., 262 U. S. 679, 683.

(d) The administrative boards are not vested with immunity from judicial control as coordi-

nate branches of the government; and no legal obstacle to an interpretation of the provisions of the amendment as extending to their actions in prescribing rates, arises from such limitation of the judicial power.

We believe the legislation in every state providing for rate regulation by administrative boards, contains requirements for hearings upon notice before a reduction in rates can be made effective; and such legislation evidences the common understanding that such hearings are required by justice in dealing with such matters and are essential to due process of law. Such understanding and practice cannot be disregarded in considering the extent of the constitutional limitation.

Crane v. Hahlo, 258 U. S. 142, 147.

Second. But if we assume that the due process clause does not require in all cases a hearing upon notice, with opportunity to introduce competent evidence, before an administrative tribunal can lawfully reduce rates, the question still remains as to whether, due to the peculiar provisions of the Washington statute limiting the right of judicial review of the orders of the administrative tribunal, the due process clause of the Fourteenth Amendment requires such procedure with respect to the orders of the

Department of Public Works of that State. It will be remembered that the statutes of Wash ington, as construed by the Supreme Court of that State, limit the judical right of review to the special proceeding authorized by section 10428 Remington's Compiled Statutes, in which proceeding the court, is confined to the record of the proceedings before the Commission. No new or additional testimony may be taken.

Willapa Power Co. v. Pub. Serv. Com., 110 Wash. 193, 195.

State ex rel. R. R. Com. v. O. R. & N. Co., 68 Wash. 160, 168.

State ex rel. R. R. Com. v. G. N. Ry. Co., 68 Wash. 257, 265.

State ex rel. C. M. & St. P. Ry. Co. v. Pub. Serv. Com., 94 Wash. 274, 285.

State ex rel. O. R. & N. Co. v. R. R. Com., 52 Wash. 17, 27-8.

As against an attack in any other manner, the order is made conclusive. In this particular the Washington statute is materially different from the Interstate Commerce Act.

It has been noted that this Court held in *Chicago, M. & St. P. Ry. Co. v. Minnesota*, 134 U. S. 418, that where an order of a railroad commission reduced the rates of a carrier, and the statute contained no provisions for notice or hearing with opportunity to the carrier to intro-

duce testimony or for a judicial review of such order, but made the order conclusive, the proceedings were violative of the due process clause in the Fourteenth Amendment. As the Washington statute makes the order of the commission or department conclusive except in the special proceeding in which the Court is confined to the testimony before the administrative board, the judicial condemnation of the Minnesota statute and proceeding must apply to the Washington statute and proceeding unless the limited right of review provided for in the latter provides the due process which was missing in the former. That this limited right of review is sufficient if the proceedings are had in conformity with the statute, is determined in *State ex rel. Oregon R. R. & N. Co. v. Fairchild*, 224 U. S. 510, 523-8. But to have this effect there must, obviously, be an adequate hearing with full opportunity to the carrier to introduce evidence. Where the order of the administrative board is made conclusive except in a special proceeding and in that proceeding the court is confined to the evidence before the board, a failure to provide for a full hearing before the board would deny the utility the protection of due process of law quite as effectively as did the Minnesota statute. This is fully recognized and affirmed in *State ex rel.*

O. R. & N. Co. v. Fairchild, 224 U. S. 510, when considering the railroad commission law of Washington which, so far as this proposition is concerned, was in substance the same as the Public Service Commission Act involved here. The Court there said:

> "It (the carrier) complains that the statute did not afford it the means of making a defense before the Commission and yet required it to attack the reasonableness of the order, on such evidence as it might have been able to produce before the administrative body. If this were true the defendant's (the carrier) position would be correct, for the hearing which must precede the taking of property is not a mere form. The carrier must have the right to secure and present evidence material to the issue under investigation. It must be given the opportunity by proof and argument to controvert the claim asserted against it before a tribunal bound not only to listen but to give legal effect to what has been established." Pp. 524-5.

> "The defendant insists, however, that no matter how complete the right to be heard before the Commission, the statute having denied all other opportunity for testing the validity of the order in the state courts, furnished an utterly inadequate judicial review because, as the carrier could not anticipate what decision would be made, it was unjust to require it to produce evidence, to show in advance, the unreasonableness of an order, the terms of which were not known. From this it argues that the statute was unconstitutional. * *

> The position would be true if the defendant had not been put on notice as to what order was asked for. * * ." P. 525.

It is thus settled that, regardless of the rule which might obtain under other conditions, under the Washington statute with its prohibition against the review of the order of the Department of Public Works except upon the evidence offered before the Department, notice and a hearing with full opportunity to the carrier to secure and present evidence, is required by the due process clause of the Fourteenth Amendment.

The constitutional right to secure and present evidence material to the issue under investigation, to the opportunity by proof and argument to controvert the claim asserted against it before a tribunal bound not only to listen but to give legal effect to what has been established, and to a judicial review of the order made, requires, since that review is limited to the evidence offered before the Department, that the order of the Department should be justified by the evidence introduced. If an order could be made upon facts within the knowledge of the Department, but not disclosed by testimony introduced, the utility would be denied not only the opportunity to controvert this secret evidence to which

controlling weight might be given, but would also be denied a judicial review upon the evidence upon which the order was in fact made, for neither it nor the court could know what this secret knowledge of the Department was.

In *Interstate Com. Com. v. Louisville & N. R. R. Co.*, 227 U. S. 88, 93, this Court denied a claim that an order of the Commission could be sustained upon a presumption that the Commission was authorized to secure, and presumably had secured, knowledge, not introduced in evidence, which would sustain the order made, saying:

> "But such a construction would nullify the right to a hearing—for manifestly there is no hearing when the party does not know what evidence is offered or considered and is not given an opportunity to test, explain or refute. * * The Commission is an administrative body and, even when it acts in a quasi-judicial capacity, is not limited by the strict rules, as to the admissibility of evidence, which prevail in suits between private parties. *Int. Com. Com. v. Baird*, 194 U. S. 25. But the more liberal the practice in admitting testimony, the more imperative the obligation to preserve the essential rules of evidence by which rights are asserted or defended. In such cases the Commissioners cannot act upon their own information as could jurors in primitive days. All parties must be fully apprised of the evidence submitted or to be considered, and must be given opportunity to cross-examine witnesses, to inspect documents and to offer evidence in explanation or rebuttal.

In no other way can a party maintain its rights or make its defense."

And see: *Chicago Junction Case,* 264 U. S. 258, 265.

U. S. v. Abilene & S. R. Co., ... U. S. ....., ...; decided May 26, 1924; U. S. Sup. Ct. Advance Opinions June 16, 1924; No. 16, p. 593, 598.

"Our attention is called to the fact that the commission viewed the stations. If this is meant as a suggestion that we are to presume that its members thereby acquired information as to existing facilities, and possibly based their orders upon such information as well as upon the evidence produced before them, it should be replied to by pointing out that the law clearly contemplates that all the evidence upon which the Commission bases an order of this nature is to be preserved in some permanent form, to the end that *all of it* be certified to the Court upon a review. Upon no other theory could the court determine the reasonableness of the Commission's orders. If an order can rest upon information obtained by a view of the members of the commission, without such information being in any manner brought before the Court upon a review, then no order could be held to be either reasonable or unreasonable, legal or illegal by the court, except such an order as would so show by its own terms. In such a case the presumption of reasonableness would practically destroy the right of review in the courts, in view of the fact that no evidence can be received before the court, the question being determinable then only upon the evidence produced before the commission and by it certified to the court."

State ex rel. G. N. Ry. Co. v. R. R. Com., 60 Wash. 218, 232.

These decisions determine that a legal hearing requires that *all* of the testimony upon which the order is based shall be openly submitted, with full opportunity of cross-examination, explanation and rebuttal; and that the limited right of judicial review authorized by the Washington statute can only be had if this testimony is made a part of the record. And since the due process clause of the Fourteenth Amendment requires that there shall be a hearing and right of judicial review, it follows that under a statute like that of Washington, the provision of the federal constitution, as well as the terms of the state act, require that the order made be supported by evidence openly introduced and embodied in the record; and an arbitrary finding or order, one not supported by testimony, is violative of the provisions of the Fourteenth Amendment as well as of the terms of the statute. It is not only a legal error but a constitutional violation.

An attempt may be made to distinguish the decisions in *State ex rel. O. R. & N. Co. v. Fairchild*, 224 U. S. 510, and *New York & Queens Gas Co. v. McCall*, 245 U. S. 345, from the case at bar upon the ground that those cases, since they

required the construction of improvements involving payments for the cost thereof, indubitably took the property of the utility (see *O. R. & N. Co. v. Fairchild,* 224 U. S. 510, 523), while in the case at bar the defendants in error deny that there is a taking. The contention of the defendants in error in this connection would be: that the carriers are authorized by the statute to collect only such charges as are just, fair, reasonable and sufficient; that they have no property rights in their rates in excess of this; and that any reduction in the rates which does not reduce them below this level, is not a taking of their property. But the carriers have a right, which is a property right, to collect charges which are just, fair, reasonable and sufficient (*Chicago, M. & St. P. Ry. Co. v. Minnesota,* 134 U. S. 418, 457); and the question involved is whether the existing rates, which are presumptively reasonable (*Interstate Com. Com. v. Chicago G. W. Ry. Co.,* 209 U. S. 108, 110; *Cinn. N. O. & T. P. Ry. Co. v. Rankin,* 241 U. S. 319, 327), are within this right. The issue is thus one as to the right to property claimed by the carriers; and the protection of the due process clause is quite as applicable to the determination of this question as it is to an admitted taking.

Randall v. Patch, 118 Me. 303, 305; 108 Atl. Rep. 97, 98.

In this connection we desire to direct attention to a recognized distinction between the just, fair, reasonable and sufficient rate which the statute of Washington grants to carriers the right to collect, and the reasonable rate which is the minimum that the federal constitution requires the states to allow the carriers to collect.

From the legislative standpoint that rate of return is reasonable which is not unfair to the shipper and is at the same time large enough to meet the demands of legislative policy in promoting and encouraging railroad investments. The legislature, or the legislative administrative board, takes into account the risk involved, the community service rendered, past or prospective unprofitable periods, and all other elements tending to determine what is a reasonable rate from the standpoint of a wise policy. A reasonable rate, in the legislative sense, therefore, may, and usually does, mean a rate which is in excess of that which would be merely non-confiscatory.

Detroit & M. R. Co. v. Mich. R. R. Com., 203 Fed. Rep. 864, 870.

Detroit & M. R. Co. v. Mich. R. R. Com., 171 Mich. 335, 346; 137 N. W. Rep. 329, 333.

Railroad Com. v. H. & T. C. R. Co., 90 Tex. 340, 353-4; 38 S. W. Rep. 750, 755-6.

Houston Electric Co. v. Mayor, etc., 212 S. W. Rep. 198, 201.

M. St. P. & S. Ste. M. Ry. Co. v. R. R. Com., 136 Wis. 146, 167-8; 116 N. W. Rep. 905, 912-3.

State Pub. Util. Com. v. Springfield Gas & Elec Co., 291 Ill. 209; 125 N. E. Rep. 896-895.

Murray v. Pub. Util. Com., 27 Ida. 603, 617-8.

Dimmitt etc. Com. Co. v. R. R. Co., 47 I. C. C. Rep. 287, 298.

Railroad Com. v. A. H. T. Ry. Co., 48 I. C. C. Rep. 312, 368.

And that the legislature of Washington intended to authorize the collection of more than merely non-compensatory rates is evident from the use of the term "sufficient." Rates shall be "just, fair, reasonable *and sufficient.*"

The statute having conferred upon the carriers the right to charge such reasonable and sufficient rate, a deprivation of that right would constitute a taking of property even though the reduced rates would not reduce the revenues below the line of what would be considered as confiscatory from the standpoint of a reasonable return upon the value of the property employed in the service.

As the determination of what is a reasonable and sufficient rate involves a legislative discre-

tion, however, the Courts are necessarily limited, in reviewing the sufficiency of rates established by the legislature or administrative board, to the determination of that rate which does not fall below the line of the constitutional minimum; otherwise it would substitute its judgment of what was reasonable and sufficient from the standpoint of legislative policy for that of the administrative tribunal, which it cannot do. There is, then, a property right to collect a reasonable and sufficient charge, but no power in the courts of *direct* protection of that right, unless it is invaded to an extent which will reduce the revenues below the line of a reasonable return on the investment. But the very absence of a direct power of protection emphasizes the importance and necessity of such indirect protection as results from the requirement of a due hearing and prohibition of arbitrary action.

It follows from what has been said that it is the duty of the Court to consider the evidence for the purpose of determining whether it supports the findings material to the order made or whether the action of the Department was arbitrary. Its jurisdicition is, of course, confined to the federal questions involved; and it is without authority to substitute its judgment for that

of the Department of Public Works as to the wisdom or policy of the order. Neither will it analyze or balance the evidence for the purpose of determining whether it preponderates for or against the conclusion of the Department thereon. But it is its duty to determine whether there have been material findings made without evidence or such other arbitrary or capricious action by the Department as is violative of the due process clause of the federal constitution; and it will enter upon the examination of the record so far as shall be necessary to enable it to determine such matters; and will, since the question is one of a violation of the federal constitution, exercise its own independent judgment with respect thereto.

New York & Queens Gas Co. v. McCall, 245 U. S. 345, 348.

Downey v. Richards, 151 U. S. 658, 667.

Kansas City So. Ry. Co. v. C. H. Albers Com. Co., 223 U. S. 573, 591.

Cedar Rapids Gas Co. v. Cedar Rapids, 223 U. S. 655, 668-9.

So. Pac. Co. v. Schuyler, 227 U. S. 601, 611.
Truax v. Corrigan, 257 U. S. 312, 324.

Ohio Valley Co. v. Ben Avon Borough, 253 U. S. 287, 289.

Bluefield W. W. & Imp. Co. v. Pub. Serv. Com., 262 U. S. 679, 689.

II.

FINDINGS MATERIAL TO THE SUPPORT OF THE ORDER ENTERED WERE MADE ARBITRARILY WITHOUT ANY EVIDENCE TO SUPPORT THEM, AND IN VIOLATION OF THE DUE PROCESS CLAUSE OF THE FOURTEENTH AMENDMENT TO THE FEDERAL CONSTITUTION.

That the Washington Public Service Commission Act properly construed and applied, would provide the due process of law required by the Fourteenth Amendment to the federal constitution, is not here questioned. The contention here is that although the Department pursued the form of a hearing, giving notice and permitting the cross-examination of adverse witnesses and the introduction of evidence by the carriers, it deprived the carriers of all benefit thereof by disregarding such evidence and making its material findings, those without which its order could not be sustained, either wholly without evidence or contrary to the uncontroverted testimony; and that such findings and the order based thereon are wholly arbitrary.

The constitutional amendment prohibiting the states from depriving any person of life, liberty or property without due process of law, was intended to secure and does secure more than

an empty observance of forms. It is a substantial right which is given. And it is determined that the Court will look beyond the mere form; and if it finds that a party has been deprived of life, liberty or property by a procedure which is in substance lacking in due process of law, it will grant relief regardless of the forms pursued.

Chicago, B. & Q. Ry. Co. v. Chicago, 166 U. S. 226, 233 et seq.

Londoner v. Denver, 210 U. S. 373, 385.

Interstate Com. Com. v. Union Pac. R. Co., 222 U. S. 541, 547.

State ex rel. O. R. & N. Co. v. Fairchild, 224 U. S. 510, 523-4.

No attempt will be made to enumerate all of the matters as to which the Department made unwarranted findings and pursued arbitrary methods. A few of the more material instances only will be considered.

First. As said in the statement of the case, none of the schedules of log tariffs involved were common to two or more of the railway companies, none provided for joint or common rates, each was a separate schedule filed by a single company prescribing rates upon its own lines only. No relationship or connection between any two of the companies with respect to

such schedules or rates was charged in the complaint, and none existed. The complaint was, from the separate character of these schedules, a separate complaint against each of the carriers with respect to its own schedules. Each carrier introduced evidence showing or tending to show the value of its own railway properties employed in the log transportation done by it, the costs to it of such transportation, and the revenues which it derived therefrom. Testimony as to such costs and revenues of each of the carriers, was also introduced by a witness, Mr. Gray, called on behalf of the Associated Log Shippers who introduced evidence to secure a reduction in these rates. This testimony disclosed wide and material variations between the values of the properties of the different companies involved; between the revenue received from such transportation, whether per thousand feet, per ton mile, per car mile, or per car; between the rates; and between the operating costs of such transportation and in other matters. As illustrative of these differences we may note the following statistical figures. These figures relate to the operations in 1920, the year preceding the hearing and the period for which most of the data placed in evidence was compiled.

Total number of carloads of logs hauled:

Northern Pacific	101,725
Great Northern	21,483
C. M. & St. P.	84,848
O.-W. R. & N.	15,892

Average length of haul of loaded car of logs:

Northern Pacific	31.38 miles
Great Northern	32.02 miles
C. M. & St. P.	23.81 miles
O.-W. R. & N.	15.02 miles

Average revenue per loaded car of logs:

Northern Pacific	$12.88
Great Northern	14.83
C. M. & St. P.	12.17
O.-W. R. & N.	12.55

Average revenue per M. feet, B. M.:

Northern Pacific	$1.672
Great Northern	2.269
C. M. & St. P.	1.668
O.-W. R. & N.	1.542

Average revenue per loaded car mile of logs:

Northern Pacific	$0.40997
Great Northern	0.46294
C. M. & St. P.	0.51090
O.-W. R. & N.	0.83556

(Associated Log Shippers' Revised Exhibit No. 2, Items 1, 8, 10, 11 and 12; Record p. 86, f. 196a-7.)

Average revenue per 1,000 tons of logs per mile:

Northern Pacific	$12.80
Great Northern	17.00
C. M. & St. P.	17.08
O.-W. R. & N.	24.74

(Associated Log Shippers' Revised Exhibit No. 3; Item 12; Record p. 88, f. 196a-9.)

Dividing the average revenue per loaded car mile, shown in item 12 of Associated Log Shippers' Revised Exhibit No. 2 by the average number of loaded feet per loaded car, shown in item 6 of the same exhibit, we find the following variations in the rates for transporting 1,000 feet of logs one mile:

Northern Pacific	$.05314
Great Northern	.07084
C. M. & St. P.	.07006
O.-W. R. & N.	.10256

The accuracy of these figures, taken from the Associated Log Shippers' exhibits, has never been questioned.

In Associated Log Shippers' Exhibit No. 3A (Record p. 83, f. 194-7) the operating costs of transporting 1,000 gross tons one mile for the entire systems and in the State of Washington as a whole are stated as follows:

	Entire	Wash.
Northern Pacific	$4.23	$5.51
Great Northern	4.48	7.13
C. M. & St. P.	4.55	6.11
O.-W. R. & N.	5.43	6.61

The Great Northern state figures as given in this exhibit are stated to be estimated on the 1919 returns. * But in Associated Log Shippers' Revised Exhibit No. 4, item 6 (Record p. 88, f. 196a-10) the corrected state cost figures are given as follows:

Northern Pacific	$5.508
Great Northern	6.970
C. M. & St. P.	6.105
O.-W. R. & N.	6.609

Mr. Gray, by whom these figures were prepared, gave these as the corrected figures of the average operating cost of transporting 1,000 gross tons one mile in the State of Washington and their accuracy as a statement of such cost is unquestioned. However, he further used them in his exhibit as representative of the average operating cost of transportation of logs in that state (Mr. Gray; Record p. 641, f. 558-9; pp. 643-4, f. 562-565); and their accuracy for this purpose is denied. But for the present purpose of pointing out the differences in the status of the several plaintiffs in error with respect to this log traffic, these figures of Mr. Gray may be used.

The total gross ton miles of all freight and the total gross ton miles of logs, transported in Washington were:

	All freight	Logs
Northern Pacific	3,863,664,519	191,683,564
Great Northern	1,896,743,278	37,975,889
C. M. & St. P.	1,772,600,093	117,031,358
O.-W. R. & N.	$1,056,570,068	14,744,623

(Associated Log Shippers' Revised Exhibit No. 4; items 5 and 10; Record p. 88, f. 196a-10.)

The percentage ratio of the gross ton miles of log shipments to the total gross ton miles of all freight computed from the above figures, is:

Northern Pacific	4.9%
Great Northern	2.0%
C. M. & St. P.	6.6%
O.-W. R. & N.	1.3%

Many other differences between the respective carriers with respect to the log traffic as well as in other matters, appear in the exhibits. The foregoing are sufficient to establish that the just, fair, reasonable and sufficient rate upon the lines of one carrier would not, necessarily, or even probably, be the just, fair, reasonable and sufficient rate upon the lines of another; that the rate which would be sufficient on one, may well be confiscatory on another. This is well illustrated by the effect upon the revenues of the respective carriers of the reduction resulting

from the order made by the Department. This was, of course, not a part of the evidence before the Department as the order itself was not made until some months after the taking of testimony was closed. But the statute of Washington (sec. 10429, Rem. Comp. Stat.) providing for a supersedeas suspending any order of the Department upon the issuance of a writ or review, requires a hearing, upon notice, at which the applicant must establish that great and irreparable dam age will result to the applicant if a supersedeas be not granted. And at this supplemental hearing before the Court the plaintiffs in error showed, and the Court found, that the losses which the respective carriers would sustain as a result of the order, if wrongfully made, would be:

Northern Pacific	$200,000
Great Northern	120,000
C. M. & St. P.	271,000
O.-W. R. & N.	40,000

These figures were, of necessity, based on the 1920 log transportation.

It is very apparent from these figures that a rate based on an *average* of the transportation costs of all the companies plus a reasonable return upon the value of the combined properties assigned to the log traffic, could not be a

just, fair, reasonable and sufficient rate to each. It would necessarily be a high, perhaps excessive, rate as to some, and below the authorized just, fair, reasonable and sufficient rate to others. As to the latter, it might well be confiscatory.

Notwithstanding these differences the Department fixed a rate which should be the same for each of the plaintiffs in error, and fixed that rate upon a basis of an average cost—a cost moreover which, as will be shown, was not itself representative of the average cost of log transportation.

Finding XIII, Record p. 25.

As there is *no* testimony even suggesting that the costs of this transportation were the same on the lines of any two of the carriers, and there was an abundance of uncontroverted evidence that such was *not* the fact, the *average* cost was necessarily incorrect as to each of the carriers. And the assumption made by the Department in fixing the common rate prescribed by it for all of the carriers, that such cost figure correctly represented the cost to each of the log transportation done by it, was purely arbitrary.

The Supreme Court of Washington in affirming the order of the Department, said with reference to this use of an assumed common cost as a basis for the rate prescribed:

> "It is admitted that the cost and revenue of one road would not be the same as the cost and revenue of another road. It is a fact, however, that the four carriers serve practically the same territory and they themselves submitted a uniform distance tariff rate. Otherwise the one having the lower rate would secure a larger proportion of the traffic. The carriers would not seriously object to a uniform distance tariff rate, if it would fully compensate them for their services. This objection will therefore be removed if it is determined that the proposed rates are compensatory."

(Record pp. 53-4, f. 148-9.)

This argument is untenable.

(a) Assuming that the log transportation is competitive—an assumption not justified by the evidence and not true in fact—and that each carrier must meet the rates of its competitors or lose the business, the question as to whether it is better to forego the business than to secure it at such rates as its competitors may have established, is one of business discretion and management which each carrier has a right to determine for itself. It is not a consideration which an administrative body or the courts can permit to influence them.

> "It must never be forgotten that while the state may regulate, with a view to enforcing reasonable rates and charges, it is not the owner of the property of public utility companies, and is not clothed with

the general power of management incident to ownership."

State ex rel. S. W. Bell Tel. Co. v. Pub. Serv. Com., 262 U. S. 276, 289.

S. P. R. Co. v. Interstate Com. Com., 219 U. S. 433.

Interstate Com. Com. v. Chicago & G. W. Ry. Co., 209 U. S. 108, 118-9.

C. M. & St. P. Ry. Co. v. Wisconsin, 238 U. S. 491, 501.

Cinn. N. O. & T. P. Ry. Co. v. Interstate Com. Com., 162 U. S. 184, 197.

"The carriers may do what they could not be compelled to do."

Interstate Com. Com. v. Union Pacific Ry. Co., 222 U. S. 541, 553.

And see: *People v. Pub. Serv. Com.*, 145 N. Y. Sup. 503, 508.

And the exercise of power by the state to regulate rates not only for the purpose of securing just and reasonable rates for the public, but also upon the ground that it is politic for the railway company to meet competition, thereby depriving the company of such discretionary powers of management, would be in itself a clear taking of the company's property.

So. Pac. Co. v. Interstate Com. Com., 219 U. S. 433, 444.

People v. Stevens, 197, N. Y. 1, 9-11; 90 N. E. Rep. 60, 63.

(b) It may be conceded that a uniform distance tariff applicable on the lines of different carriers may be lawfully established; subject, however, to the limitation that it shall be reasonable as to each. But the state cannot, by establishing a uniform tariff, require any carrier to conform thereto, if the rate, so established, is, as to it, non-compensatory.

> The *Missouri Rate Cases,* 230 U. S. 474, 508-9.

And it cannot make the rates of one carrier the basis of rates to be established for another.

> *Pub. Serv. Com. v. State,* 118 Wash. 629, 635-6.
>
> *Appeal of Great Northern Ry. Co.,* 60 Minn. 461; 62 N. W. Rep. 826.

And while we may further concede that the plaintiffs in error were willing to accept a uniform distance tariff *if it would provide adequate compensation for each carrier operating thereunder* and did file such a tariff, the carriers at no time intimated in any manner a willingness to accept such a tariff constructed upon any other basis; and the schedule filed by them was constructed upon that basis.

In view of the attempted use of this tariff, moreover, it is proper to call attention to the stipulation under which it was filed, viz.; that it should not be construed as an abandonment of

any of the evidence adduced by the carriers, but should be without prejudice. (Record p. 822-3, f. 887-8; Stipulation and Additional parts of Record pp. 169-70, f. 1326-1328.)

(c) It is said that the objection to the uniform and common rate is removed if it is determined to be compensatory. But this does not meet the objection. Upon what basis is such determination to be made? If such determination is to be made upon the assumption that this assumed cost is the true cost, the assumption indulged by both the Department and the State courts, a determination that the rate is compensatory is a mere begging of the question. Whether the rate is or is not compensatory, can only be determined by a comparison of the revenues with the true costs. And a rate prescribed without a determination of what those costs are in fact, is a mere arbitrary prescribing of rates lacking every element of due process.

Second. For the purpose of fixing the operating cost to the plaintiffs in error of the log transportation, confined for the most part to certain lines west of the Cascade Mountains in Washington (Finding VI, Record p. 22), the Department assumed that the cost of transporting 1,000 gross tons of such logs 1 mile was the same as the average cost of transportation of 1,000

gross tons 1 mile on the *systems* of the four carriers.

Finding XIII; Record p. 25.

No testimony whatsoever is to be found in the record to support this assumption. All of the pertinent testimony is contradictory thereof.

(a) The average length of haul of revenue freight on the systems, in the State, and of the logs, was shown as follows:

	System	State	Logs
Northern Pacific	334.90	142.24	31.38
Great Northern	259.00	160.34	32.02
C. M. & St. P.	252.76	113.16	23.81
O.-W. R. & N.	240.17	106.07	15.02

(N. P. Annual Report to I. C. C., item 181; Record f. 279-286.

Testimony of Mr. Turnburke; Record p. 813, f. 870-871.

C. M. & St. P. Annual Report to I. C. C., item 181; Record f. 365-8.

O. R. & N. Annual Report to I. C. C., item 181; Record f. 509.

N. P. Annual Report to Department Pub. Works, Washington, item 181; Record f. 287-9.

G. N. Annual Report to Department Pub. Works, Washington, item 181; Record f. 452-6.

C. M. & St. P. Annual Report to Department Pub. Works, Washington, item 181; Record f. 364.

O.-W. R. & N. Annual Report to Department

of Pub. Works, Washington, item 181; Record f. 510-12.

Associated Log Shippers' Revised Exhibit No. 2; item 8; Record p. 86, f. 196a-7.)

Due to the larger proportion of fixed initial and delivery costs which must be assigned per mile where the mileage is lessened, the cost per ton mile of transportation decreases as the length of the haul increases. This is obvious. It is not only a recognized principle of rate making, but is a matter of which the courts take cognizance.

St. Louis & S. F. Ry. Co. v. Hadley, 168 Fed. Rep. 317, 348-9.

M. K. & T. Ry. Co. v. Love, 177 Fed. Rep. 493, 499.

N. P. Ry. Co. v. Keyes, 91 Fed. Rep. 47, 51, 53.

Galveston Chamber of Commerce v. R. R. Com., (Tex.) 137 S. W. Rep. 737, 748.

Ill. Cent. R. R. Co. v. People, 121 Ill. 304, 317-318; 12 N. E. Rep. 670, 674.

Board of Trade v. Alabama M. R. Co., 4 I. C. C. Rep. 348.

Lumber Rates from the Southwest, 29 I. C. C. Rep. 1, 13.

Coke Producers Asso. v. B. & O. R. R. Co., 27 I. C. C. Rep. 125, 150.

Capital City Oil Co. v. Y. & M. V. R. R. Co., 39 I. C. C. Rep. 141, 146.

And see: *C. M. & St. P. Ry. v. Tompkins*, 176 U. S. 167, 178.

Minneapolis & St. L. R. Co. v. Minnesota, 186 U. S. 257, 262.

Minnesota Rate Cases, 230 U. S. 352, 463.

Rowland v. St. L. & S. F. R. Co., 244 U. S. 106, 109.

Louisville & N. R. Co. v. R. R. Com., 196 Fed. Rep. 800, 818-9.

As the average length of the system haul exceeds the average length of the state haul, the average cost per ton mile of such haul should be materially less than for the state haul; and the evidence established such to be the case. The average cost per ton mile for the system, given in Associated Log Shippers' Exhibit No. 3-A (Record p. 83, f. 196-4), and the corrected average per ton mile costs for Washington, given in Associated Log Shippers' Revised Exhibit No. 4, item 6 (Record p. 88, f. 196a-10), are as follows:

	System	Wash.
Northern Pacific	$4.23	$5.508
Great Northern	4.48	6.970
C. M. & St. P.	4.55	6.105
O.-W. R. & N.	5.43	6.609

And as the average length of the log haul is far below the average length of the state haul, the cost per ton mile of the transportation of logs, other things being equal, should be in excess of the average cost of transportation per ton mile in the state.

(b) The ratio of empty car mileage to loaded car mileage in the log transportation is much above the average. Logging cars are, almost without exception, returned empty from the unloading point to the point of reloading. The empty car mileage on this equipment is therefore not less than loaded car mileage. This is undisputed.

(See testimony of Mr. Dow; Record p. 361, f. 81-3; p. 370; f. 97-8; p. 379, f. 114; Mr. Nicholson, Record p. 400, f. 148; Mr. Guild, Record p. 440, f. 218; Mr. Peterson, Record p. 532, f. 372-3; Mr. Albee, Record pp. 554-5, f. 409-412; p. 561-2, f. 423; Mr. McDonough, Record p. 616, f. 515; Mr. Gray, Record p. 641, f. 558.)

But the proportion of empty car mileage to loaded car mileage is much less when all freight transportation is considered. Such proportions are shown to be as follows:

	Freight car miles loaded	Freight car miles empty
Northern Pacific	66,120,596	29,474,135
Great Northern	35,211,192	15,331,793
C. M. & St. P.	29,823,395	16,912,739
O.-W. R. & N.	19,177,509	7,405,235

(Northern Pacific Exhibit No. ....., items 51 and 52, Record f. 287-289; Great Northern Exhibit No. 10, items 51 and 52, Record p. 279; C. M. & St. P. Exhibit No. 19, items 51 and 52, Record p. 210; O.-W. R. & N. Exhibit No. ....., items 51 and 52, Record f. 510, 512.)

(c) It requires an assignment of approximately four cars to the logging service to keep one car under load or in revenue service.

(Testimony of Mr. Dow, Record p. 370, f. 98; p.p. 373-6, f. 105-109; Mr. Nicholson, Record p. 401, f. 150, pp. 421-424, f. 185-190; Mr. Guild, Record p. 439, f. 216, p. 449, f. 232, pp. 450-1, f. 233-4; Mr. Albee, Record pp. 560-1, f. 421, p. 567, f. 433.)

Each car engaged in the logging service is thus non-revenue producing three days of every four even when assigned to a continuous logging operation, a condition non-existent in the transportation of other commodities.

(d) The average miles per day made by cars and locomotives in logging service is much less than that made in the general freight transportation service. A comparison of such care mileage with the average freight car mileage on the Coast Division and on the system of the Chicago, Milwaukee & St. Paul line, covering the periods of September, October, November and December, 1920, showed average miles per day:

	In logging service	On the division	On the system
September	6.39	38	36.4
October	10.13	37.6	37.1
November	9.66	45.6	31.4
December	2.57	52	23.9

(Testimony of Mr. Nicholson, Record pp. 400-1, f. 149.)

(e) Due to the breakage of cars in the handling of logs, the cost of maintenance of equipment employed in logging service is abnormally heavy. This is testified to directly.

(See testimony of Mr. Dow, Record p. 361, f. 82; Mr. Nicholson, Record pp. 404-5, f. 155-6; Mr. Guild, Record p. 440, f. 217-218; Mr. Albee, Record p. 557, f. 415, p. 561, f. 422-3; pp. 565-566, f. 431-433; Mr. McCaustland, p. 609, f. 505.)

It is further shown by more exact statistics:

Great Northern Exhibit No. 9, item 314 (Record p. 275, f. 379), shows its total freight car repairs in 1920, for the States of Washington and Oregon, cost $1,240,520.42. Its Exhibit No. 10, items 51, 61 and 69 (Record p. 279-80, f. 381), shows its total loaded freight car mileage in the state, for the same period, was 35,443,908 miles. Its average cost of repairs of freight cars was thus approximately $.035 per loaded car mile. But its cost of repairs of cars in certain logging operations, covering a period of 52 days, averaged $.123 per loaded car mile.

(Testimony of Mr. McDonough, Record pp. 617-8, f. 517-8; Great Northern Exhibit No. 20; Record pp. 291-2, f. 391.)

Chicago, Milwaukee & St. Paul Exhibit No. 18, item 124 (Record f. 312), shows its total freight car repairs in 1920, for the State of Washington,

cost $830,715.35. Its Exhibit No. 19, items 51, 61 and 69 (Record p. 210, f. 313a), shows its total loaded freight car mileage in the state, for the same period, was 30,434, 993 miles. Its average cost of repairs of freight cars was thus $.0272 per loaded car mile. But its average cost of repairs of cars employed in logging service, exclusive of all amounts collected from loggers on account of damages to such equipment, as determined by a study of the actual costs for a six months period extending from April to September, 1919, both months inclusive, was $.1109 per loaded car mile.

(Testimony of Mr. Ingalls, Record pp. 345-347, f. 56-7;

Testimony of Mr. Greengard, Record p. 658, f. 589-90;

C. M. & St. P. Exhibit No. 24, Record p. 265, f. 319.)

A statement of the cost of repairs of cars employed in logging service on the Cowlitz, Chehalis & Cascade Railroad, a short line engaged principally in the transportation of logs and lumber, covering a period from July 1, 1920, to February 21, 1921, showed the average cost of repairs of logging cars to be $.1243 per loaded car mile, of which $.1107 was borne by the carrier.

(Testimony of Mr. Brown, Record pp. 396-7, f. 142-4; C. M. &. St. P. Exhibit No. 8; Record p. 196, f. 301.)

Of the witnesses referred to, Mr. Dow was Superintendent of the Chicago, Milwaukee & St. Paul Company's Coast Division; Mr. Nicholson was General Manager of the Chicago, Milwaukee & St. Paul Company's lines west of Mobridge, South Dakota; Mr. Guild was Assistant Superintendent of the Oregon-Washington Railroad & Navigation Company; Mr. Albee was Superintendent of the Northern Pacific Company's Tacoma Division; Mr. McDonough was Superintendent of the Great Northern Company's Cascade Division. All were experienced railroad men; and the divisions under their charge were those over which, for the most part, the Washington logs were transported.

It is evident that the conditions peculiar to the log transportation so testified to all tend to increase the cost of such transportation above the average cost of transportation of all commodities. And in addition to the testimony as to these particular matters, witnesses testify directly that the cost of log transportation is much greater than that of transporting traffic in general.

(Testimony of Mr. Nicholson, Record p. 401,

f. 150, p. 404, f. 155; Mr. Albee, Record p. 565, f. 430, p. 570, f. 440, p. 579, f. 454.)

None of this testimony is controverted and no evidence conflicting therewith was introduced.

Nevertheless the Department, as stated, assumed that the cost per ton mile of the log transportation, principally in Western Washington, did not exceed the average cost per ton mile of all transportation on the *systems* of the four carriers.

The only justification for this assumption suggested by the Department is found in Findings X and XI (Record p. 23). In commenting upon these suggestions we shall follow the order of such suggested justifications:

(a) That any increased cost of haul over the Cascade Mountains is offset by favorable climatic conditions. There was not a word of testimony with reference either to any increased cost of haul over the Cascades or any other defined range of mountains, or with respect to the effect on the cost of climatic conditions.

(b) It is true that logs are not hauled across the Cascade Mountains. But the underlying assumption that the grades across these mountains are the important grades, is not testified to by any one and is not true in fact. Western Washington is a hilly country. Railroads con-

structed to reach the timber lands are compelled to conform to a great extent to the natural contour of the earth. There are up grades and down grades on these lines, going and returning. The implication that empty cars are continuously hauled up grade and the loads down grade in the log traffic, is not supported by any testimony and is not true in fact. As a whole the grades are descending from the mountains to the waters of Puget Sound, but this is not a steady uniform descent. There are intervening portions of the lines where the general descending grade is transformed into an ascending grade.

(Testimony of Mr. Albee, Record p. 571, f. 440-1, p. 583, f. 460.)

And as to what extent these assumed grades affect the cost of operation is not suggested by any one.

(c) That logs generally are delivered in lots of from ten to thirty cars, and rarely ever in lots of less than five cars, thus constituting a very desirable form of traffic.

Again, we must chalienge the statement:

Mr. Albee, Superintendent for the Northern Pacific, testified that there are a great many cases of farmers and other land owners having a small amount of timber on their land, cutting

the same and shipping it in lots of one and two cars.

(Record p. 560, f. 420 and see p. 562, f. 425, p. 581-2, f. 458.)

Department's Exhibit D, (Record f. 195) shows that 41.21% of the entire log movement in 1920 was in single car lots.

C. M. & St. P. Exhibit 23, (Record p. 218-264) shows numerous movements of less than 10 or even 5 cars, yet the exhibit shows only the aggregate of the movements from each point to each other point that occurred during a monthly period; and it cannot be doubted that if the movements were shown by days instead of by months the list of movements in less than 10 cars would be greatly increased.

The O.-W. R. & N. Co. operates no exclusive log trains. (Testimony of Mr. Guild, Record p. 437, f. 213.)

Nor was there any testimony as to the difference in cost between handling logs in single car lots and in train loads.

(d) That the carriers are able to keep their logging equipment more profitably employed than is the equipment used in handling other commodities; and that log cars are under load a greater proportion of the time than are other

classes of equipment having the same average length of haul.

There is not a scintilla of evidence supporting any of these statements; and they are directly in conflict with the undisputed testimony that the ratio of empty to loaded movement in the logging equipment is far above the average; also that it requires not less than four cars to be assigned to a logging operation to keep one under load.

(e) That the tonnage of logs per car is greater than in the case of the average commodity. This factor if true would affect the car revenue, but it is difficult to see how it can affect to any perceptible extent the cost, the subject with which we are dealing. And while the statement that the tonnage of logs per car is greater than in the case of the average commodity, is true if all freight business, including less than car load freight, is considered, (Record p. 591-2, f. 474-6) the uncontradicted evidence shows that it is not true as to many commodities, including the most of those with which rate comparisons were made. The average tonnage of a carload of logs was shown to be:

Northern Pacific	67,196 lbs.
C. M. & St. P.	64,251 lbs.
O.-W. R. & N.	70,762 lbs.

(N. P. Exhibit No. 7, Record, p. 98, f. 205; C. M. & St. P. Exhibit No. 9, Record p. 196-200, f. 302; O.-W. R. & N. Exhibit No. 7, Record p. 314, f. 464.)

And Mr. Mount, Assistant General Freight Agent, O.-W. R. & N. Co., testified that sand and gravel, brick, scrap iron and cement, commodities used for rate comparison purposes, generally moved in loads of 80,000 pounds or more (Record, p. 460-1, f. 249). While Mr. Albee, Northern Pacific Superintendent, testified that coal, sand and gravel loaded heavier than logs. (Record, p. 580, f. 456, p. 591, f. 474-5, p. 592, f. 475-6.)

(f) That the log traffic should not be charged with a proportion of the cost of the large terminals as it makes little use thereof.

Northern Pacific Exhibit 28 (Record p. 114, f. 219) shows that in the month of September, 1920, which was selected as a normal month of fairly heavy traffic, the proportion of loaded log cars to other loaded cars moving through certain terminals was as follows:

	Cars of logs	Other loaded cars	Per cent of log cars
Tacoma	1967	9127	17.73
Centralia	631	5856	9.72
Hoquiam	1170	1641	41.62

And C. M. & St. P. Exhibit 23 (Record p. 218-

264, f. 318-26) shows the use in 1920 of the larger terminals by loaded log cars as follows:

Tacoma	5364
Hoquiam	4318
Bellingham	6540
Everett	3526

This finding, moreover, is based upon a misconception of the theory of the per ton mile apportionment of costs—the theory upon which Mr. Gray's figures are based and upon which the findings of the Department are made. The average cost per ton mile is derived by dividing the total costs by the total ton miles; and, necessarily, the resultant cost per ton mile varies with the volume of business as represented in the ton miles. When this volume of business diminishes, the cost per ton mile increases; and when the volume of business is increased, the cost per ton mile is decreased. The volume of business is beyond all question greatly increased by adequate terminals. Imagine these carriers having constructed their lines into Washington and then fixed their termini at the various saw mills, serving only the lumber and timber interests; their volume of business and consequest tonnage would be diminished in substantially the ratio which the business from commodities other than lumber and timber products bears to

their entire business. Under these conditions the ton mile cost would be greatly increased. The enhanced volume of business due to the existence and use of the terminals thus greatly reduces the per ton mile cost of operation. And if the logging traffic is, in determining its cost, to receive the benefit of the reduced average per ton mile cost of operation resulting from the increased tonnage which those terminals produce, as the Department, by fixing that cost upon the basis of a system average cost, has held that it shall, it is properly chargeable with a due proportion of the cost of operating such terminals to the use of which such reduction is due. It cannot claim the benefits and refuse the burdens.

That the theory of undue enhancement of operating costs of log transportation due to an improper apportionment of terminal costs is a fallacious one, is made manifest by Northern Pacific Exhibit 18 (Record p. 103-5, f. 212). In this exhibit the operating costs of the Seattle and Tacoma Main Line including the Puget Sound Terminals, of the same line exclusive of these terminals, and of the branch lines, are separately stated. The operating costs of the main line, including the terminals, are shown to be per car mile $37.91. The same costs on the

branch lines, which do not include terminals, are, per mile $38.82.

The C. M. & St. P. Exhibits make a similar showing:

Exhibit 5 (Record, f. 294-5) showing 1919 costs, shows:

	Cost per loaded car mile	Cost per net ton mile
Olympia Division	$.4393	$.01528
National Park Branch	.7205	.02809
Bellingham Division	.7186	.02772
Willapa Harbor Branch	.6079	.02441
Balance of State	.2895	.01075

The "Balance of the State" lines included the Seattle and Tacoma terminals, the largest in the state.

Exhibit No. 26, (Record p. 268, f. 322) showing operating costs in 1920, shows:

	Per 1000 gross ton miles	Per car mile
Coast Division	$ 7.6887	$ .25794
Bellingham Division	12.5744	.40323

The large terminals and large interstate business are on the Coast Division. The average per ton mile cost is thus shown, in every case, to be lower on those divisions which include large terminals than on those where such terminals do not exist.

(g) The suggestion that the cost of log transportation is reduced because it moves largely

over branch lines, is without merit. Due to the reduced volume of traffic on branch lines, the per car mile or per ton mile cost of transportation thereon is, without exception, greater than on main lines. This is shown not only by the Northern Pacific and C. M. & St. P. exhibits above referred to, but is testified to by Mr. Nicholson; and conceded by Mr. Calderhead, rate expert for the Department, and by Mr. Gray, expert for the Log Shippers Association.

(Testimony of Mr. Nicholson, Record p. 405, f. 156, Mr. Calderhead, Record p. 637-9, f. 552-554; p. 753, f. 756-7; Mr. Gray, Record p. 647, f. 570, p. 835, f. 909.)

(h) That the unit freight operating cost in Washington would be no greater than the system unit freight operating cost if the assembling and terminal expense in connection with interstate shipments is apportioned over the entire length of the haul.

This statement is totally devoid of support in the evidence. No witness so testified, either directly or inferentially. No attempt was made by anyone to ascertain or determine the assembling or terminal expense in connection with interstate shipments, and the record is devoid of all data with respect thereto.

As a matter of theoretical argument—and the

condition of the record permits no other—it is extremely doubtful if a system of extending assembling and terminal costs of interstate traffic over the entire length of haul would not result in an increase of the Washington unit freight operating cost. Under the present system the Washington costs are charged with but a single terminal operation in interstate traffic, either the cost of assembling and dispatching the east-bound traffic or of receiving and delivering the westbound traffic. If such Washington costs were distributed over the entire length of the haul, the assembling and dispatching or receiving and delivering costs of the Eastern terminals would, of course, receive a like apportionment; and Washington operating costs would thus be increased by a proportion of the assembling and dispatching costs of Chicago, Milwaukee, Minneapolis, St. Paul, Aberdeen, Butte, or other Eastern originating point, upon the west-bound interstate freight consigned to Washington, and by a proportion of the receiving and delivering charges of such eastern terminals upon all freight originating in Washington and delivered at such points. Is it not quite as probable that the amount of these eastern terminal charges would add more to the Washington operating costs, than the relief from a portion of the Washington

terminal charges would reduce them? The terminals in such cities as Chicago, Milwaukee and Minneapolis are more extensive than those in Seattle and Tacoma, and presumably more expensive to operate.

Kansas City Trans. Bureau v. A. T. & S. F. Ry. Co., 15 I. C. C. Rep. 491, 493.

(i) That no part of the terminal and assembling expense in relation to interstate traffic is properly chargeable to the log traffic.

Theoreticaly we may concede this to be true. But it leads nowhere. The ton mile unit cost is largely dependent upon the volume of business; and we have seen that it is least on those divisions where there are large terminals and where the terminal and assembling expense of interstate traffic preponderates and that the apparent ton mile cost of the log traffic is decreased instead of increased thereby. It is impossible to determine with exactness the cost of transporting any commodity and it is impossible to segregate every movement. This is recognized by both the Interstate Commerce Commission and the Department of Public Works of Washington. Each of these bodies are authorized by law to prescribe the form in which railway accounts shall be kept (Interstate Commerce Act, sec 20, par. 5; Remington's Comp. Stat. of Washington, sec.

10416), but neither body has required a segregation of such costs as the terminal and assembling expense of interstate or intrastate traffic. It is therefore fair to presume that both Commission and Department were of opinion that such segregation was both impracticable and useless—a conclusion with which we think few will disagree. If under the methods of accounting some assembling and terminal costs of interstate freight are reflected in the ton mile cost of log transportation, equally some cost of the log traffic is charged against the interstate freight and the log traffic relieved therefrom. And as the ton mile costs are least when the terminal and assembling expense of interstate traffic is greatest, the log shipper, at least, cannot complain.

Many of the reasons for the adoption of this basic unit for the measurement of the log transportation cost are, as pointed out, in direct conflict with uncontroverted evidence, others are wholly without support from the testimony, still others are presumptions based on presumptions. Thus it was presumed that climatic conditions in Western Washington were conducive to a lower railroad operating cost; that the per ton mile operating cost of Washington intrastate traffic was unduly increased by a failure to segregate and exclude items of cost incurred in assembling

and delivering interstate freight; and that costs of terminals were improperly allocated in the railroad accounting to the log traffic. These and other matters were presumed without any direct evidence. As to what these undue costs, if any there were, or as to what any of the matters referred to by the Department in support of its cost finding, amounted to in dollars and cents, there is not the slightest testimony or information. Having first assumed that the matters suggested in Findings X and XI will result in a decrease in the ton mile operating costs of the log transportation, the Department then assumed that the amount of such decrease would be such as would reduce these costs to an equality with the average system ton mile operating cost. It was a bald presumption based upon a presumption—or rather a bald assumption. But such presumption upon presumption, inference upon inference, is inadmissible and cannot be made the basis of a finding.

> "These seem to us to be nothing more than conjectures. They are not legitimate inferences, even to establish a fact, much less are they presumptions of law, they are inferences from inferences; presumptions resting on the basis of another presumption. Such a mode of arriving at a conclusion of fact is generally, if not universally, inadmissible."
>
> *U. S. v. Ross*, 92 U. S. 281, 283.

Manning v. Insurance Co., 100 U. S. 693, 697-8.

Looney v. Metropolitan R. Co., 200 U. S. 480, 488.

United States F. & G. Co. v. Des Moines Nat. Bank, (C. C. A.), 145 Fed. Rep. 273, 279.

M. K. & T. Ry. Co., v. Foreman, (C. C. A.), 174, Fed. Rep. 377, 383.

The conclusion of the Department that the per ton mile cost of log transportation in Washington can be measured by the average ton mile cost of transporting all freight on the system of the carrier, over but a small portion of which the logs move, thus finds no support in the record. It is an arbitrary assumption.

> "A division according to ton-miles assumes that the cost of moving a ton of intrastate freight one mile is the same on the average as the cost of moving a ton of interstate freight one mile. If the average cost differs in the two classes of traffic, the difference must be allowed for in order to make a correct apportionment of the total expense."

Missouri Rate Cases, 230 U. S. 474, 505.

And see:

Wood v. Vandalia R. R. Co., 231 U. S. 1, 5-6.

The effect of the use of the system average unit of cost thus arbitrarily adopted as the basic unit of cost of the log transportation, is most material.

Upon the basis of this unit the operating cost of the 1920 log transportation of the four carriers, exclusive of taxes, is found to be $1,923,198. (Finding XIII, Record, p. 25.)

Computed upon the basis of the state average ton mile cost of freight transportation, the cost of the 1920 log transportation of the four carriers, exclusive of taxes, is shown in Associated Log Shippers Revised Exhibit No. 4, item 11 (Record p. 88, f. 196a-10) as follows:

Northern Pacific	$1,055,297
Great Northern	264,703
C. M. & St. P.	714,474
O.-W. R & N	97,447
Total	$2,131,921

A sum $208,723 in excess of that produced by the use of the system average ton mile cost.

And if the cost of the log transportaion be determined upon the basis of the average ton mile cost on the particular division over which the logs in fact moved—unquestionably the most accurate of the three bases—such costs are shown to be much greater than as shown in Associated Log Shippers Revised Exhibit No. 4. Neither the Great Northern nor O.-W. R. & N. Companies introduced exhibits showing their operating costs on this basis; but the exhibits introduced by the other companies establish the correctness of this statement.

Northern Pacific Exhibit No. 18 (Record p. 105, f. 212), shows the cost of its 1920 log transportation computed upon the assumption that the per ton mile cost of such transportation was the same as the average ton mile cost of transporting all freight on the divisions over which the logs moved. These costs, exclusive of taxes, as there shown, were:

On its main line and branches, including the Puget Sound Division which includes the Seattle and Tacoma terminals and the Seattle-Tacoma line	$1,848,209.80
On its main line and branches, excluding the Puget Sound Division	1,626,922.56

These figures are comparable with the figure of $1,055,297 shown as the Northern Pacific's 1920 costs of log transportation as stated in Associated Log Shippers Revised Exhibit No. 4, and show that that exhibit by using the state wide average ton mile cost as the basic unit, understated the Northern Pacific Company's log transportation costs not less than $571,625.00.

C. M. & St. P. Exhibit No. 26 (Record, p. 268, f. 322), shows the cost of that Company's 1920 log transportation on its Coast and Bellingham divisions upon the assumption that the per ton mile cost of such transportation was the same as the average ton mile cost of transporting all

freight on those divisions. These costs, exclusive of taxes, as thus shown, were:

Coast Division	$726,259.54
Bellingham Division	179,742.03
Total	$906,001.57

This exhibit does not include the costs on the Chicago, Milwaukee & St. Paul's Olympic Division, but the costs shown are $191,527.57 greater than the cost figures based on the state-wide average per ton mile cost shown in Associated Log Shippers Revised Exhibit No. 4, although that exhibit includes the Olympic Division.

It thus appears that Associated Log Shippers Revised Exhibit No. 4 by the use of the state wide average per ton mile cost of transportation, understates the cost of such transportation in the case of the Northern Pacific and Chicago, Milwaukee & St. Paul Companies alone, not less than $763,000.; and as the arbitrary assumption by the Department that such costs were properly figured on a *system* average ton mile cost, resulted in a calculation of such costs at $208,723 below the cost figures in Associated Log Shippers Revised Exhibit No. 4, this arbitrary assumption by the Department placed the assumed cost of the 1920 log transportation

more than $1,000,000 below the true cost. Certainly a most material result.

Third.—The Department assumed an arbitrary figure as representative of the value of the properties of the carriers upon which the reasonable return was to be based.

Aside from combining the values of the properties of the four carriers, a procedure which rendered it impossible for the Department to figure a reasonable return for any of them individually, the Department made three arbitrary assumptions in figuring the values.

(a) It found (Finding XIV, Record p. 25-6) that the minutes of the 1921 State Equalization Committee (a board for the assessment of railroads for taxing purposes), showed the assessed value of the properties of the four companies in the State to be $294,360,243. Also that on a valuation of the railroad properties in the state, then aggregating 3,007 miles, the Railroad Commission had found the actual cost of that mileage was approximately $50,000 per mile. The present main track mileage in the state is found to be 4936 miles. Much of this mileage was not therefore included in the valuation made. This proceeding by the Railroad Commission is not in evidence; and the date when made is not stated. As, however, the Railroad Commission

was abolished in March, 1911 (1911 Laws of Washington, chapter 117), it must have been prior to that time. Having made these findings the Department then found,

> "For the purpose of estimating the approximate return earned by the four principal carriers within the state from the log traffic during the year 1920, we will *assume* (italics supplied) the value of the property of the carriers within the state in any way used or useful in connection with the log traffic, is $300,000,000., a greater sum perhaps than the evidence will justify."

(Finding XV, Record p. 26.)

The carriers had introduced evidence as to the valuation of their respective properties.

> (Testimony of Mr. Bryan, Record p. 703-8, f. 667-676; N. P. Exhibit No. 35, Record p. 119-170, f. 225-225-47; Testimony of Mr. Allen Record p. 700-703, f. 662-668; N. P. Exhibit No. 34, Record p. 117-8, f. 224-224b.
> Great Northern Exhibit No. 17, Record p. 290, f. 388-390. Testimony of Mr. Crane, Record p. 654-7, f. 583-8; C. M. & St. P. Exhibit No. 22, Record p. 218, f. 317.
> Testimony of Mr. Dodds, Record p. 824, f. 889-90; O.-W. R. & N. Exhibit No. 8, Record p. 315, f. 465.)

This testimony was in nowise controverted; but it was ignored.

The total valuation of the combined properties of the four carriers "in any way used or useful in connection with the log traffic," or $300,000,-

000 was *assumed*. How this figure was arrived at neither we nor the Court can tell. What properties are included and what excluded is not stated. All we know and all that the Court can know is that it is not based on any evidence. We can only infer that by some intuitive process—it could not have been by reasoning since the facts stated by the Department afforded no basis for the conclusion,—this figure of $300,000,000. was in some manner derived from a cost of $50,000. per mile stated, without any evidence to support it since no such report was introduced in evidence, to have been the cost found by the Railroad Commission (and therefore at a time prior to 1911) to have been the per mile cost of 3,007 miles out of the present 4936 miles of road, and from an assessment of $294,360,243 made in 1921 for taxation purposes.

That the value of railway properties as determined by an assessment for taxation is not a proper basis for the fixing of rates, has been determined.

Missouri Rate Cases, 230 U. S. 474, 497-8.

The valuations made prior to 1911 would, in view of the changed costs of labor and material, be of little or no aid in determining the value of the same properties in 1920.

State ex. rel. S. W. Bell Tel. Co. v. Pub. Serv. Com., 262 U. S. 276, 287-8.

Bluefield Water Works & Imp. Co. v. Pub. Serv. Com., 262 U. S. 679, 689, 691-2.

But here the properties valued included but 3,007 miles out of 4,936 miles of main track in existence in 1920; and the valuation made included only two short branches of the Chicago, Milwaukee & St. Paul lines (Record p. 756, f. 761-2), the remaining lines of that Company having been constructed subsequent to the date thereof. Certainly under these circumstances the valuation by the Railroad Commission afforded no basis for a finding as to present values. It is inconceivable that any court would consider evidence of the cost of construction of one railroad as competent evidence of the cost of a totally different line.

Whether the estimated value of $300,000,000 for the properties used or useful in connection with the log traffic is too high or too low, is a matter with which we are not now concerned. What we are concerned with is as to whether it was arrived at upon a proper consideration of evidence or was arbitrarily assumed. A guess is not the less a guess because the guesser has guessed correctly. And an arbitrary assumption of a value is not the less arbitrary and violative of the constitutional right to a due

hearing and a determination based upon competent evidence, even if the assumed valuation is in excess of the true value.

(b) Having assumed the combined values of the properties of the carriers within the state "in any way used or useful in connection with the log traffic" to be $300,000,000, the Department then fixed the proportion of this amount assignable to the freight business in the state as follows:

> "Following the method of division as indicated by the carriers' exhibits, it is considered that not more than 75 per cent of such value, or $225,000,000 is assignable to the freight business within the state." (Finding XV, Record p. 26.)

What was the method?

The Northern Pacific exhibits establish an operating loss in the log traffic and do not, therefore, enter into consideration of the segregation of property values as between freight and passenger service.

Mr. Turnburke, Great Northern statistician, testified in connection with that Company's exhibit 23, upon which the Great Northern largely relied, that he figured the investment charge upon a basis of 6% upon the value of the property employed in the particular operation covered by that exhibit, and prorated that between the log service and other service upon

a train mile basis. (Record p. 789-791, f. 823-829.)

A similar basis was used in the preparation of C. M. & St. P. Exhibit No. 26. (Testimony of Mr. Greengard, Record p. 661, f. 594.)

Mr. Dodds, Auditor for the O.-W. R. & N. Co., testified that in the preparation of that Company's exhibit No. 8, he apportioned the value of the Grays Harbor branch between freight and passenger service on the basis of the operating expenses assigned between such service; and that he found that on this basis, the percentage accruing to freight was 68% of the value of the property on this line, while on the North river line 100% was assignable to freight. (Record, p. 824, f. 889-890.)

Two distinct methods were thus used by the carriers. Moreover since the use of either method necessitated calculations with respect to a definite piece of property upon which either the mileage of log and other cars could be determined, or the comparative freight and passenger operating expenses ascertained, neither was open to the Department proceeding, as it did, upon the basis of undefined portions of four different lines having nothing in common with respect either to mileage of log or other trains or with respect to comparative freight and passenger expenses. Obviously the 75% or $225,-

000,000 assigned to freight service was an arbitrary assumption. It was probably based upon the following statement by Mr. Gray:

> "I had no segregation in the case of the Great Northern between freight and passenger expense, but I found in the case of the Milwaukee and in the case of the Northern Pacific, in each case freight operating expense in the state was approximately 75% of the total expenses in the state, and I applied that figure to the Great Northern operating expenses in the state." (Record p. 890, f. 1012.)

But aside from the fact that a segregation of the property values between the freight and passenger service upon the basis of the comparative expense is of questionable correctness (see Minnesota Rate Cases, 230 U. S. 352, 458-9), the estimate by Mr. Gray was clearly insufficient to support the Department's finding. He presumed from a certain approximate ratio between the freight and passenger expenses in the cases of the Northern Pacific and Chicago, Milwaukee St. Paul Companies, that a similar ratio existed in the case of the Great Northern; the Department then presumed, if its findings was based upon this evidence, from the presumption of Mr. Gray, that the same ratio existed in the case of *all* the companies—drawing inference from inference, basing presumption on presumption.

(c) Having assumed the combined values of the material properties to be $300,000,000., and that 75% of this, or $225,000,000, should be considered as assignable to the freight business within the state, the Department then found:

> "During the year 1920 the gross ton miles of logs, hauled by the four principal carriers within the state constituted 4.97 per cent of the total gross ton miles of revenue freight hauled within the state by such carriers. It is therefore considered that five per cent of that part of the value of the carriers' property assigned to freight service should represent the tentative rate base for use in determining the rate of return earned by the log traffic in 1920, this tentative rate base being $11,250,000." (Finding XV, Record p. 26.)

We have heretofore noted that the individual ratios of the gross ton miles of logs hauled by plaintiffs in error in 1920 to total gross ton miles of freight hauled by them in the state in the same year, were,

Northern Pacific	4.9%
Great Northern	2.0%
C. M. & St. P.	6.6%
O.-W. R. & N.	1.3%

The apportionment of 5% of the $75,000,000 of value assigned to freight for the purpose of determining the rate base assignable to the log traffic was thus incorrect as to all of the carriers; it gave to some too high and to other too low, a

rate base. It was as to all arbitrary and unjustifiable.

The importance of a correct determination of the value of the property used as a basis for fixing a rate, where, as here, a question of the confiscatory character of the rate is involved, is unquestionable.

> *State ex rel. Southwestern Bell Tel. Co. v. Pub. Serv. Com.*, 262 U. S. 276, 287-8; and cases cited.
>
> *Georgia Ry. & P. Co. v. R. R. Com.*, 262 U. S. 625, 629.
>
> *Bluefield W. W. & Imp. Co. v. Pub. Serv. Com.*, 262 U. S. 679, 689 et seq.
>
> "It appears to be preposterous to suppose that the state can fix the reasonable returns on the property devoted to its use by the carrier without reference to the value of the property thus devoted."
>
> *Louisville & N. R. Co. v. R. R. Com.*, 196 Fed. Rep. 800, 824.

The arbitrary assumptions of the Department as to the property values involved, were upon a most material matter. They permeated and affected all of its findings and conclusions with respect not only as to the reasonableness and sufficiency of the existing rates, but as to the reasonableness and sufficiency of those prescribed in its order. And since they were arbitrary, they deprived the carriers of the bene-

fit of the hearing required by the federal constitution.

Fourth.—Taxes were arbitrarily apportioned to the log traffic.

> "Owing to the fact that the log traffic is for the most part handled upon comparatively inexpensive branch lines; and to the fact that it makes practically no use of the costly terminals; and to the further fact that the rolling stock used in the handling of same has a comparatively low cost, it seems unfair to assess against the log traffic its exact pro rata of taxes based on gross earnings. An assessment of approximately 50 per cent of its pro rata of taxes on such basis should be sufficient." (Finding XII, par (c), Record, p. 24.)

> "The taxes assigned to the log traffic are one-half of those contended for by the carriers after the elimination of income taxes." (Finding XIII, Record, p. 25.)

Fifth.—Many, although not all, of the arbitrary assumptions and findings made, were the result of the consideration by the Department of the four carriers as if they were but a single entity; and the attempt to establish a rate based on average investments and costs. This attempt, in itself arbitrary and unjustifiable, required the Department to disregard the costs and material property investments of the individual carriers. It required that body to assume a proportionately equal property investment upon which the return should be based, for each; and to assume

that the per ton mile costs of the log transportation were identical in each case. This necessitated a disregard of the evidence which established varying investment values and varying costs. The basic principle upon which the Departments proceeded thus compelled assumptions and findings which were incorrect and arbitrary as applied to the individual carriers; and as it necessarily involved findings and conclusions which would be violative of the rights of the individual carrier and of the public with respect thereto, this basic theory was in itself violative of the due process clause.

It appears from the foregoing review of the findings made by the Departments as to the operating costs of the log transportation and as to the rate base assigned to the log traffic, that such findings were in direct conflict with the undisputed testimony, or wholly without evidence to support them, or assumptions made from premises wholly insufficient. Findings thus made are entitled to no prima facie presumptions in their favor.

Wilmington City Ry. Co. v. Taylor, 198 Fed. Rep. 159, 176-7.

U. S. v. B. & O. S. W. Ry. Co., 226 U. S. 14, 20.

And they are violative of the right to a hearing.

> "The defendant has the statutory right to a hearing. That right is not accorded it if the hearing is a mere matter of form, the decision arbitrary, and the real question for consideration lost sight of."
>
> *People v. Pub. Ser. Com.*, 145 N. Y. Sup. 503, 507.

Even a legislative presumption of one fact from evidence of another where there is no rational connection between the fact proved and that presumed, is arbitrary and constitutes a denial of due process of law where it results in deprivation of property.

> *Mobile etc. R. R. Co. v. Turnipseed*, 219 U. S. 35, 43.
>
> *Lindsley v. National Carbonic Gas Co.*, 220 U. S. 61, 82.

And *a fortiori* assumptions by an administrative tribunal without sufficient premises to support them used as a foundation for a reduction of rates in a rate proceeding, are equally prohibited.

> "A finding without evidence is arbitrary and baseless." * *
>
> It "is inconsistent with rational justice, and comes under the constitution's condemnation of arbitrary power."
>
> *Interstate Com. Com. v. Louisville & Nash. R. R. Co.*, 227 U. S. 88, 91.

We submit that the proceedings by the Department of Public Works were, for the foregoing reasons, violative of the due process clause of the Fourteenth Amendment; and that its order reducing the log rates and the judgment of the State Court affirming that order, should be set aside irrespective of whether the rates so established yield a constitutionally reasonable return upon the value of the properties assigned to the log transportation.

III.

THE RATES PRESCRIBED IN THE ORDER OF THE DEPARTMENT OF PUBLIC WORKS ARE CONFISCATORY AND THEREFORE DEPRIVE THE PLAINTIFFS IN ERROR OF THEIR PROPERTY WITHOUT DUE PROCESS OF LAW AND DENY THEM THE EQUAL PROTECTION OF THE LAW.

Under the preceding points we have endeavored to show that the proceedings of the Department were arbitrary and that by reason of their arbitrary character the plaintiffs in error were denied the protection of the due process clause in determining whether their existing rates were reasonable and fair and in determining what were the just, fair, reasonable and sufficient rates which the state law authorized them to collect.

Under the present heading we propose to show that the rates prescribed are confiscatory in the sense that they are wholly insufficient to return to the carrier that reasonable compensation for its services which is requisite to avoid conflict with the Fourteenth Amendment. What has been said under points I and II is applicable to all of the plaintiffs in error. But the question as to whether a rate is or is not confiscatory in the above sense, is one which must be determined for each carrier separately. The same rate may be confiscatory as to one carrier and reasonable and sufficient in the case of another, even though a competitor. The effect of the rate upon one is wholly immaterial in determining its confiscatory or non-confiscatory character in the case of another. The question must be determined as to each company upon the basis of the property investment, operating costs and returns of such company.

The Missouri Rate Cases, 230 U. S., 454, 508-509;

Public Service Com. v. State, 118 Wash., 629, 635-6;

Appeal of Great Northern Ry. Co., 60 Minn., 461; 62 N. W. Rep., 826.

The facts upon this issue of confiscation pertinent to the cases of the Northern Pacific, Great Northern and Oregon-Washington Rail-

road & Navigation Companies are presented and considered in a separate brief or briefs prepared on behalf of those companies; and the discussion of the evidence showing confiscation in this brief will be confined to the case of the Chicago, Milwaukee & St. Paul Company.

C. M. & St. P. Exhibit No. 23 (Record p. 218-264, f. 318-318-26) shows the number of carloads of logs shipped each month in the years 1919 and 1920 from every station on the Chicago, Milwaukee & St. Paul lines included in the Idaho, Coast, Olympic and Bellingham Divisions, giving the following details: month of shipment; point from and point to which such shipments moved; distance; number of cars; number of car miles; number of feet of logs hauled and the revenues collected the detailed information being summarized on sheet 1 of the Exhibit.

Those divisions include all of the company's lines in Washington. The Coast Division includes the National Park Branch, formerly the Tacoma Eastern Railroad, the Willapa Harbor Branch, formerly the Puget Sound & Willapa Harbor Railroad, and all other lines in Western Washington except the Bellingham & Northern division and the Port Angeles or Olympic division, formerly the Seattle, Port Angeles & Western

Railroad; (Testimony of Mr. Dow, Record p. 361, f. 81; Mr. Greengard, Record p. 331-2, f. 32-34; p. 335-6, f. 39-40; p. 337, f. 41-2; Mr. Nicholson, p. 403. f. 153) while the Idaho Division includes the lines in Eastern Washington.

The Exhibit was made up from the Station records and is a substitute for C. M. & St. P. Exhibit No. 7, which it supplements and corrects (Testimony of Mr. Greengard, Record p. 657-8, f. 588-9) and the accuracy of the figures therein has never been questioned. The summarized figures on sheet 1 of this Exhibit show that in 1920 the Chicago, Milwaukee & St. Paul Company hauled logs and collected charges therefor on its Coast and Bellingham Divisions as follows:

	No. loaded Cars	Revenue Received
Coast Division,		
(Jan. to Aug.)	45,532	$485,432.56
(Sept. to Dec.)	17,746	234,969.38
Total for Coast Division	63,278	$720,401.94
Bellingham Division,		
(Jan. to Aug.)	5,126	$ 61,416.50
(Sept. to Dec.)	2,707	44,389.37
Total for Bellingham Div.	7,833	$105,805.87
Total for Coast and Bellingham Divisions	71,111	$826,207.81

The operating costs of this transportation—that is, the cost exclusive of taxes and any return upon the value of the property used—is shown on C. M. & St. P. Exhibit No. 26 (Record p. 268, f. 322), as follows:

	Coast Div.	Bellingham Div.
Total Operating Expenses	$726,259.54	$179,742.03
Revenue Received, (Exhibit No. 23)	720,401.94	105,805.87
Net Operating Loss	$ 5,857.60	$ 73,936.16
		$ 5,857.76
Total Net Operating Loss on Coast and Bellingham Divisions		$ 79,793.92

There was thus on these two divisions a net operating loss of $79,793.92 if the figures in Exhibit No. 26 correctly represent the operating costs properly chargeable to the log transportation.

But in Finding VII (Record p. 22) the Department found:

> "All operating cost exhibits introduced covered the year 1920, during which year the peak prices for labor and material were reached. Since 1920 there has been a marked decline in labor and material costs. As near as can be determined, the unit cost of railroad operation at the present time (February 1, 1922) is approximately 20 per cent less than the unit cost of a year ago."

This statement is without support from any evidence introduced and is purely arbitrary. It is, indeed, meaningless on its face. What is meant by the "unit cost of railroad operation?" Is it the car mile cost, the gross ton mile cost, the revenue ton mile cost or some other unit of measurement? The units above enumerated are those habitually used in determining various operating costs. In Finding XIII the Department uses a revenue ton mile unit. But each of these cost units varies with and is to a very large extent controlled by the volume of business. A decrease in the cost of labor and material does not by any means necessarily result in a decrease in any such units of cost, a statement which can be abundantly verified by comparison of the various 1920, 1921 and 1922 annual reports of the carriers from which it will appear that due to the decreased volume of business in such years the various unit costs increased regardless of any decrease in the cost of labor or material.

But assuming that the cost of the 1920 log transportation would have been 20% less if transported under the conditions prevailing in 1922, we get the following results:

	Coast Div.	Bellingham Div.
1920 Operating Cost of Log Transptn.	$726,259.54	$179,742.03
20% of above	145,251.90	35,948.41
Estimated 1922 *Cost*	$581,007.64	$143,793.62

This would have left an operating gain upon the revenues actually received in 1920 as follows:

	Coast Div.	Bellingham Div.
1920 Revenues Rec'd	$720,401.94	$105,805.87
1922 Estimated Costs	581,007.64	143,793.62
Operating Gain	$139,394.30	—$ 37,987.75

But the 1920 log transportation would not have produced these revenues if the charge had been collected upon the rates prescribed by the Department's order. Applying the rates prescribed in this order for the transportation of logs on single cars equipped with steeel bunks, to the actual 1920 movement of logs on the Coast and Bellingham divisions, it appears that the carrier's revenues would have been reduced as follows:

	Coast Div.	Bellingham Div.
Revenues actually received in 1920	$720,401.94	$105,805.87
Revenues at prescribed rates applied to 1920 log movement	572,753.35	75,974.42
Decrease in Revenues	$147,648.59	$ 29,831.45

Comparing the 1920 operating costs reduced 20% in accordance with Finding VII with the revenues from the 1920 log business as they would have been if the Department's rate on single cars equipped with steel bunks had been then in effect, we get the following results:

	Coast Div.	Bellingham Div.
Operating Cost (reduced 20%)	$581,007.64	$143,793.62
Revenue on basis of rate prescribed by Dept...	572,753.35	75,974.42
	$ 8,254.29	$ 67,819.20
		8,254.29
Operating Loss		$ 76,073.49

In figuring the reductions in revenues from the log transportation which would result from the application of the rate prescribed by the Department's order, only those reductions which would result from the application of the single car rate applicable where steel bunks are provided have, as stated, been considered. The order, however, prescribes a lower rate where the carrier does not equip the cars with steel bunks and a shipment average minimum loading where the shipment is of more than one car (Record p. 31). And to the extent that these requirements would diminish the revenues, the estimated revenues based on the applica-

tion of the single car rate applicable to cars equipped with steel bunks is too high. In Finding XXV (Record p. 29) the Department estimates that the rule prescribed as to the minimum loading will reduce the revenues approximately 6% of the total charges. And if 6% of the total charges be deducted from the revenues which would have been received from the 1920 log transportation upon the basis of the rate prescribed for logs transported on single cars equipped with steel bunks (which deduction should, according to the Department's estimate, be made), we get the following figures as representing the revenues which the Company would have derived from its 1920 log business upon the basis that only cars equipped with steel bunks were used, viz:

	Coast Div.	Bellingham Div.
Total charges (revenues collected)	$720,401.94	$105,805.87
6%	43,224.11	6,348.35
Estimated Revenues based on rate prescribed for single steel bunk equipped car	572,753.35	75,974.42
Deduct for estimated reductions due to minimum loading provision	43,224.11	6,348.35

Estimated revenues from 1920 business under rate prescribed for cars equipped with steel bunks	$529,529.24	$ 69,626.07

Comparing these revenues with the costs of the log transportation reduced 20% pursuant to the Department's arbitrary estimate of the depreciation in the cost of labor and material between 1920 and 1922, the operating loss to the carriers on the two divisions appears:

	Coast Div.	Bellingham Div.
Estimated 1922 Cost	$581,007.64	$143,793.62
Estimated Revenue	529,529.24	69,626.07
Net Operating Loss	$51,478.40	$ 74,167.55

Estimated operating loss on Coast and Bellingham Divisions on basis of assumed 1922 *reduced costs of operation and of rates prescribed by the Department*	$125,645.95

These calculations are not open to attack on account of any erroneous apportionment to the log traffic of taxes or value of property employed, for they include operating expenses and revenues only. No charge on account of taxes and no item of return on the value of the property employed in this service is included.

These calculations have been confined to the

log transportation on the Coast and Bellingham Divisions. But the log transportation on the Idaho and Olympic Divisions does not change this operating loss into an operating gain and much the less does it allow for taxes or a return upon the value of the property used.

C. M. & St. P. Exhibit No. 23 (Record p. 218, f. 318) shows that but 28 carloads of logs moved intrastate on the Idaho Division in 1920, the total revenue from which was $357.28. This is, therefore, negligible.

The Olympic Division is isolated, having no connection with any other of the Chicago, Milwaukee & St. Paul Company's lines except by a car ferry by which cars are transferred across Puget Sound; and logs are not so transported. (Record p. 532, f. 33). Although legally incorporated with the Chicago, Milwaukee & St. Paul System, it is in fact operated as an independent line. Its operating accounts are kept separately. Its operations do not come into competition with other lines. Possibly due to that fact the log rates on this line are higher than on other divisions, a fact disclosed by the comparative revenues as shown in C. M. & St. P. Exhibit No. 23 (Record p. 218-264, f. 318-318-26). Presumably for these reasons the exhibits prepared by the Department do not appear to have included this

division. And unfortunately the railway company, because of this fact, did not include the operations of this line in its analysis of costs shown in its Exhibit No. 26. All of the data necessary to formulate an exhibit for this division along the lines of Exhibit No. 26 is, however, in the record.

C. M. & St. P. Exhibit No. 23 (Record p. 258-260, f. 318-23) shows the log shipments from each point on this line, with the destination and mileage. These shipments are shown by months, the number of cars, car miles, number of feet of logs shipped and revenues collected, being shown.

As shown on the summary (Sheet 1 of Exhibit 23, Record p. 218, f. 318) the totals of these log movements on the Olympic Division in 1920 were:

	No. Cars	No. Loaded Car Miles	No. Feet	Revenues
Jan. to Aug.	8,587	244,728	55,568,750	$118,134.34
Sept. to Dec.	5,122	144,596	32,457,710	87,657.70
Totals	13,709	389,324	88,026,460	$205,792.04

The average weight of logs transported by the Chicago, Milwaukee and St. Paul Company is shown on its Exhibit No. 9 (Record p. 196-200, f. 302) as 8.21 pounds per foot. Multiplying by this figure the number of feet transported on the Olympic Division in any month as shown in Exhibit 23 and dividing by 2000 we obtain the net

tons of logs transported in that month. Multiplying the net tonnage so obtained by the miles hauled, also shown on Exhibit 23, gives the net ton miles for the month. The average weight of flat cars used in logging is stated by Mr. Gray, statistician employed by the Log Shippers' Association, to be 14 tons, those used by the Chicago, Milwaukee & St. Paul Company being slightly above this figure (Testimony of Mr. Gray, Record p. 641, f. 559). Multiplying the number of carloads of logs shipped in any month on theOlympic Division, as shown on Exhibit 23, by 14 and this result by the number of miles shown in the same exhibit, gives the loaded ton miles of the equipment. This sum added to the sum of the net ton miles will give the gross ton miles of the movement under load for such month. To obtain the true gross ton miles there should be added to this the gross ton miles of the empty cars, a figure obtained by multiplying the loaded car mileage by the 14 tons, the estimated weight of one empty logging flat. C. M. & St. P. Exhibit No. 10 (Record p. 201, f. 303) states the average cost, exclusive of taxes and any return upon the property employed—the operating cost —of transporting 1000 gross tons 1 mile in each month in 1920 on each division, including the Olympic. By applying this cost figure for any

month to the gross ton miles of the log transportation on the Olympic Division for the same month, the cost of that operation for that month is determined. It is not, of course, necessary to go through the details of these calculations in this brief. They have, however, been made; and the total operating cost of the 1920 log transportation on the Olympic Division thus arrived at was $157,697.06. The comparative revenues and costs of the log transportation on the Olympic Division in 1920 were thus:

Revenues	$	205,792.04
Costs		157,697.06
Operating gain	$	48,094.98
But the actual operating loss on the Coast and Bellingham Divisions was	$	79,793.92
And the total operating loss on all divisions, disregarding the negligible Idaho Division, was	$	31,698.94

If the Department's arbitrary assumption of a 20% reduction in operating costs be applied to the operating costs of the Olympic Division, the following results are obtained:

Operating Costs	$	157,697.06
20%		31,539.41
Cost on Olympic Divs'n as reduced	$	126,157.65

Cost on Coast and Bellingham Divisions reduced 20%.	
Coast Division	$ 581,007.64
Bellingham Division	143,793.62
Total reduced costs	$ 850,958.91
Total Revenues actually received in 1920 from log transportation.	
Coast Division	$ 720,401.94
Bellingham Division	105,807.87
Olympic Division	205,792.04
Total	$1,032,001.85
Total operating cost less estimated 20% reduction	$ 850,959.91
Operating Gain	181,041.92

But this calculation is on the basis of revenues derived from the rates in force in 1920 and not upon the rates which the Department's order requires installed. The rate for transportation on single cars equipped with steel bunks applied to the 1920 log movement on the Coast and Bellingham Divisions would, as heretofore stated, have produced revenues as follows:

Coast Division	$572,753.35
Bellingham Division	75,974.42
And applied to the movement on the Olympic Division, it would have produced a revenue of	159,615.25
Total	$808,343.02
Operating Cost reduced 20%	850,959.93
Operating loss	$ 42,616.91

There would thus be an operating deficit of $42,616.91 without taking into consideration the 6% additional reduction in revenues which the Department estimated would result from the application of the minimum loading rule prescribed, or any reduction because of the lower rate prescribed where the cars were not equipped with steel bunks. These calculations do not, as heretofore stated, include any charge on account of taxes and make no provision for any return upon the value of the property employed in the log service.

The Interstate Commerce Commission is authorized to prescribe the manner in which railway accounts may be kept and the law requires compliance with the regulations so prescribed. These regulations prescribe the manner in which different elements of cost common to both freight and passenger service shall be allocated, the basis of apportionment varying in the different elements. (Testimony of Mr. Peterson, Record p. 519-527.) And the accounts of the Chicago, Milwaukee St. Paul Company are kept in conformity with these regulations (Testimony of Mr. Nicholson, Record p. 404, f. 154-5.) A monthly statement showing the freight operating costs on each division, computed in such manner, is issued, the figures included therein being

the same which, as totaled, subsequently appear as the annual cost statements filed with the Interstate Commerce Commission and the Department of Public Works of Washington, as well as with other state railroad commissions, as a part of the Company's annual reports. (Testimony of Mr. Nicholson, Record p. 403, f. 153-4; Mr. Greengard, Record p. 659-60, f. 592.) These monthly operating figures were those used in the preparation of the cost statement shown in C. M. & St. P. Exhibit No. 26, from which the cost figures for the Coast and Bellingham Divisions above stated are taken. Those cost figures therefore represent the divisional freight cost of transporting 1,000 gross tons 1 mile computed in the manner prescribed by the Interstate Commerce Commissions. No question as to the accuracy or correctness of this method was made. During the hearing the following occurred:

> "Mr. da Ponte: Inasmuch as this is the method prescribed by law for segregation, would it be desired to go into details—do counsel intend to attack that as an improper method of making segregations?
>
> "Mr. Henderson: If we did, it would be a question of law instead of fact. I do not anticipate attacking the Interstate Commerce Commission's method of accounting."

(Record, p. 537-8, f. 381.)

And see: testimony of Mr. Calderhead, rate expert for the Department, Record p. 757, f. 763.

Nor have the accuracy of any of Mr. Greengard's figures in C. M. & St. P. Exhibit No. 26, been in any-wise called into question. The difference between the finding by the Department that the four carriers combined made an operating gain in the log transportation (it made no finding as to any individual carrier), and the showing by the Chicago, Milwaukee & St. Paul Company of an operating loss, arises exclusively from the basic difference in the cost unit adopted by which to measure those costs, the Department's figures being based on a cost unit found as the average cost of transporting 1,000 tons of freight 1 mile on the combined sys*tems* of the four carriers during the year, while those of the Company are based on the average cost of transporting 1,000 tons of freight 1 mile on the particular divisions over which, and for the particular month in which, the logs were transported.

Results When Costs are Computed on Basis of State Average Ton Mile Cost of Transportation.

The rates prescribed are also shown to be confiscatory even if the per ton mile cost of the log transportation be computed upon the basis

of the state wide average cost per ton mile, the basis used in Associated Log Shippers Revised Exhibit No. 4 (Record p. 88, f. 196a-10.) For convenience of reference we reproduce the figures of that exhibit so far as they pertain to the Chicago, Milwaukee & St. Paul Company:

1. Cost of Freight Operation	$ 10,821,922
2. Total Freight Car Miles, Loaded and Empty	47,743,436
3. Total Tare Ton Miles	907,125,284
4. Total Net Ton Miles	865,474,809
5. Total Gross Ton Miles	1,772,600,093
6. Freight Operating Cost, M. Gross Ton Miles	6,105
7. Log Car Miles, Loaded and Empty	4,041,136
8. Tare Ton Miles, Log Cars	56,575,904
9. Net Ton Miles, Logs	60,455,454
10. Gross Ton Miles, Log Traffic	117,031,358
11. Cost of Operation, Log Traffic	714,474
12. Revenue from Logs, Gross	1,032,357
13. Revenue from Logs, Net	$317,883
14. Revenue from Other Freight, Net	$3,774,023*
15. Incidental Freight Revenue	183,730

*Denotes Red Figures.

Line 13 shows a net operating gain from the log traffic of $317,883. There are, however, demonstrable errors in this exhibit, viz.:

First.—Line 2 states the total freight car miles, loaded and empty, as 47,743,436. This is the total of loaded and empty freight car miles shown in items 51, 52, 61, 62 and 69 of the sheet from the Company's 1920 annual report (Record, f. 364) and is correct. Line 3 states the total tare ton miles as 907, 125,284, which figure is obtained, according to a foot note to the exhibit, by multiplying the total car miles shown in line 2 by the assumed weight of 19 tons for the car. But in this there is an error. The total car miles in line 2 include the car miles made in the log transportation, stated in line 7 to be 4,041,136. But the cars employed in this traffic did not weigh 19 tons. Their average weight was fixed at 14 tons as shown by the foot note to the exhibit stating that the tare ton miles of log cars, shown in line 8 was obtained by multiplying the log car miles, loaded and empty shown in line 7, by 14. The correct figure for the total tare ton miles shown in line 3 is 47,743,436 minus 4,041,136 or 43,702,300 multiplied by 19, giving 830,343,700 to which should be added 56,575,904, the tare ton miles of the log cars shown in line 8, making the total tare ton miles 886,919,604 instead of 907,125,284, as stated in the exhibit. The total net ton miles stated in line 4 to be 865,474,809 is the aggregate of 742,-

859,992 ton miles of revenue and 122,614,817 ton miles of non-revenue freight shown in items 84 and 85—the aggregate being given as item 86—of the sheet from the Company's 1920 annual report (Record, f. 364.) Adding these net ton miles to the tare ton miles corrected to 886,919,604 gives 1,752,394,413 as the corrected gross ton miles in line 5. This error was apparently not noticed at the time of the hearing.

Second.—The second and more important error, to which attention was directed at the hearing, results from the failure of Mr. Gray, by whom Associated Log Shippers Revised Exhibit No. 4 was prepared, to give proper consideration to non-revenue freight in his calculation. The 865,474,809 net ton miles shown in line 4 of the exhibit was, as stated, the sum of 742,859,992 ton miles of revenue freight and 122,614,817 ton miles of non-revenue freight shown in items 84 and 85 of the sheet from the Company's 1920 annual report (Record, f. 364.) Non-revenue freight is the coal, rails, ties and other material hauled for the use of the Company in the maintenance and operation of the railway. It produces no revenue and the cost of its transportation is an operating or maintenance cost which, like other costs of operation and maintenance, must be borne by the revenue freight. In de-

termining the freight cost per ton mile for operating purposes—that is so that operating officials may know what their costs of operation are —the total costs of all freight transportation revenue and non-revenue, are properly divided by the total ton miles of revenue and non-revenue freight to get the net ton mile cost. This is in accord with the testimony of Mr. Nicholson, an operating officer, testifying from an operating standpoint (Record p. 401-2, f. (151-2.) But as all costs of freight operation, including the cost of transportation of non-revenue freight, must be borne by the revenue freight, when determining the per ton mile cost for the purpose of fixing rates, the correct unit is the revenue ton mile cost obtained by dividing the total freight costs by the total number of revenue ton miles. The revenue ton mile cost thus obtained would, of course, be greater than the gross ton mile cost. When in Associated Log Shippers Revised Exhibit No. 4 the gross ton miles were obtained by adding the 907,125,284 tare ton miles shown in line 3 to the 865,474,809, net ton miles shown in line 4, there was included 122,614,817 ton miles of non-revenue freight, and this item was in the resultant 1,772,600,093 gross ton miles shown in line 6. And the cost per 1,000 gross ton miles obtained by dividing the total freight

cost of $10,821,992, by the total gross ton miles, included the cost of the non-revenue freight transportation. The resultant cost of transporting 1,000 gross tons 1 mile, shown in line 6 as $6.05 correctly shows (except as affected by the first error pointed out) the average cost of transporting all freight, non-revenue as well as revenue. But it does not correctly show the average cost per 1,000 tons which must be borne by the revenue freight if it is to pay, as it must, *all* of the cost of freight transportation. And when this gross ton mile cost is applied to the gross ton miles of log traffic to determine the total cost thereof, as it is in line 11 of the exhibit, it fails to give the correct amount of the costs which the log traffic must bear, because it assumes that the non-revenue traffic is bearing an equal proportion of the transportation costs with the revenue traffic. The effect of the calculation thus made is to relieve the log traffic of all share of the burden of moving the non-revenue traffic.

A simple illustration will make this clear. Assume that there are 100,000 gross ton miles of log traffic and 100,000 gross ton miles of non-revenue traffic, there being no other business. Also assume that the total cost is $10,000. The cost of moving 1,000 gross tons 1 mile would

be $10,000. divided by the gross ton miles of the revenue and non-revenue traffic, or 200,000 gross ton miles, giving $0.05 per ton mile or $50.00 as the cost of moving 1,000 tons 1 mile. If this figure be then applied, as it is in Associated Log Shippers Revised Exhibit No. 4, to 100,000 gross ton miles of log traffic for the purpose of determining the cost thereof, we get $5000 as such cost. But as the assumed total cost was $10,000, the log traffic which, as the sole revenue traffic, should carry all costs, has evidently been undercharged; and the calculation has evidently charged the non-revenue traffic a proportion of the costs equal to that charged to the revenue traffic.

This error in Associated Log Shippers Revised Exhibit was pointed out at the hearing (Examination of Mr. Gray, Record p. 851-856; Testimony of Mr. Turnburke, Record p. 904-906; G. N. Exhibit....., Record p. 306-7, f. 398, 400½;

Mr. Gibbs, Record p. 909-910; C. M. & St. P. Exhibit 29, Method No. 1, Record p. 270, f. 325-325a, Method No. 2, Record p. 271.)

For the convenience of the Court we restate Associated Log Shippers Revised Exhibit No. 4, as it appears after correcting the errors above noted. The exhibit shows the per gross ton mile

cost arrived at on the basis of the combined revenue gross ton miles and non-revenue gross ton miles. As the correction of the second error requires the elimination of the non-revenue gross ton miles, it is essential to segregate the two. The exhibits, however, nowhere give the revenue gross ton miles and non-revenue gross ton miles separately. For the purpose of making this separation it is assumed that the ratio of revenue gross ton miles to the total gross miles is the same as the ratio of revenue net ton miles is to the total net ton miles, the figures for which are shown:

Net ton miles—revenue freight	742,859,992
Net ton miles—non-revenue freight	122,614,817
Total	865,474,809

(C. M. & St. P. 1920 Annual Report, items 84, 85 and 86, Record f. 364.)

Ratio of net ton miles revenue freight to total net ton miles (742,859,992 divided by 865,474,809.) 85.83%.

Associated Log Shippers Revised Exhibit No. 4 Corrected:

	Chicago Milwaukee
1. Cost of Freight Operation	$ 10,821,922
2. Total Freight Car Miles, Loaded and Empty	47,743,436
3. Total Tare Ton Miles (corrected by figuring log cars at 14 instead of 19 tons)	886,919,604

4. Total Net Ton Miles	865,474,809
5. Total Gross Ton Miles (3+4)	1,752,394,413
5a. Total revenue Gross Ton Miles (1,752,394,413 x .8583)	1,504,080,125
6. Freight Operating Cost per ~~Ton Mile ($10,821,922, divided by 1,504,080,125)~~	~~$.007195~~
Revenue Gross Ton Mile (10,821,922divided by 1,504,080,125)	$.007195
7. Log Car Miles, Loaded and Empty	4,041,136
8. Tare Ton Miles, Log Cars	56,575,904
9. Net Ton Miles, Logs	60,455,454
10. Gross Ton Miles, Log Traffic	117,031,358
11. Cost of Operation, Log Traffic (6 x 10)	$842,040
12. Revenue from Logs, Gross	$1,032,357
13. Revenue from Logs, Net	$190,316
14. Revenue from Other Freight, Net	$3,774,023
15. Incidental Freight Revenue	$183,730

These corrections change the operating gain shown in line 13 of Log Shippers Revised Exhibit No. 4 from $317,883 to $190,316.

Cost Computed on Basis of State Average Revenue Ton Mile Cost of Transportation.

These corrected figures may be, to some extent, checked as follows: The total revenue ton miles

of freight moved in Washington by the Chicago, Milwaukee & St. Paul Company in 1920 are shown in Associated Log Shippers Revised Exhibit No. 3 as follows:

8. Revenue Ton Miles Intrastate Freight	144,435,920
9. Revenue Ton Miles Interstate Freight	598,424,072
Total Revenue Ton Miles of Freight, Intrastate and Interstate	$ 742,859,992

(Associated Log Shippers Revised Exhibit No. 3, items 8 and 9, Record p. 88, f. 197a-8. And see: sheet from C. M. & St. P. Annual Report, Item 84, Record, f. 364.)

Cost of Freight Operation	$ 10,821,922
(Line 1 Associated Log Shippers Revised Exhibit No. 4; Record p. 88, f. 196a-10.)	
Dividing the cost of freight operation by the total number of revenue ton miles, gives the cost per revenue ton miles of	$ .01456656
Number of revenue or net ton miles in log traffic	$ 60,455,454
(Line 9, Associated Log Shippers Revised Exhibit No. 4.)	
Total cost of log transportation (60,455,454 x $ .01456656)	$880,628
Revenue from Logs, Gross	$1,032,357
(Line 12 Associated Log Shippers Revised Exhibit No. 4.)	

Revenue from Logs, Net	$151,729
It thus appears that while Associated Log Shippers Revised Exhibit No. 4 shows an operating gain from the log traffic of	$317,883
The exhibit when corrected, shows an operating gain from this traffic of but	$190,328
And when the costs are figured on the straight revenue ton basis, eliminating the assumption that the ratio of revenue gross ton miles to total gross ton miles is the same as the ratio of revenue net ton miles to total net ton miles, the operating gain in the log traffic appears as	$151,729

These figures are all taken from the Associated Log Shippers exhibits, except as necessitated for the purpose of making the correction. They are based on the 1920 operating cost and show the revenues as received on the 1920 rates. Using the figures as to costs as shown in Associated Log Shippers Revised Exhibit No. 4 as corrected, and making a 20% reduction to find the costs as of 1922, in accordance with the Department's Arbitrary Finding No. VII, the following figures are obtained:

Cost of operation of Log Traffic	$842,040
20% assumed reduction	$168,405
Estimated 1922 cost on state average gross ton mile basis	$673,632

But the revenues as reduced by the Department's order, instead of being $1,032,357, would be on this movement (computed at the rate prescribed for a shipment on a single car, equipped with steel bunks) as heretofore stated:

Coast Division	$572,753.35
Bellingham Division	75,974.42
Olympic Division	159,615.25
Idaho Division (not reduced)	357.28
Total:	$808,700.30

According to the estimate of the Department the revenues would be further reduced by the minium load provision of the order by an amount equal to 6% of the charges (Finding XXV, Record p. 29); this reduction is therefore to be made:

Charges (revenue collected)	$ 1,032,357.
6%	61,941.
Estimated revenues on basis of rate fixed by Department for single car equipped with steel bunks	808,700.
Estimated reduction from minimum loading requirement	61,941.
Estimated revenues under rates prescribed by Department	$ 746,759.
Estimated costs on state average gross ton mile basis	$ 673,632.
Operating Gain	$ 73,127.

If the operating costs be determined upon the revenue ton mile basis, as they should be for rate-making purposes, the net operating gain is decreased, thus:

Cost of transportation	$880,628
Estimated 20 per cent decrease	176,125
Estimated cost on 1922 cost basis	$704,502
Revenues estimated on basis of rates prescribed by Department	$746,759.00
Operating Gain	$42,257

These are operating gains only. They are based on the figures in Associated Log Shippers Revised Exhibits 3 and 4, which do not include anything for taxes or return on investment (Testimony of Mr. Gray, Record p. 645, f. 565; p. 850, f. 934).

C. M. & St. P. Exhibit No. 26 (Record p. 268, f. 322) shows the taxes and amount of return on the property used, chargeable to the log traffic, on the Coast and Bellingham Divisions. These amounts were determined by pro rating that portion of such charges assignable to freight operations between log and other freight operations upon the basis of the respective car miles in each (Testimony of Mr. Greengard, Record p. 660-661, f. 592-595; corrected p. 826, f. 893).

The figures thus shown are:

	Coast Division	Bellingham Division	Total
Taxes	$ 38,962.32	$18,851.20	$ 57,813.52
Interest on Investment			
Equipment	79,320.00	14,640.00	93,960.00
Road	180,631.51	59,858.78	240,490.29
Total interest	$259,951.51	$74,498.78	$334,450.29

The operating gain figured on the gross ton mile basis and using the state wide average cost per gross ton mile, costs reduced to the estimated 1922 costs and revenues computed on the basis prescribed in the Department's order, was ..... $ 73,127.00

The taxes chargeable to the log traffic on the Coast and Bellingham Divisions only, were ..... $ 57,813.00

Upon this basis the rates prescribed would yield an operating gain of ..... $ 15,314.00

Which sum would be applicable to the taxes on the Olympic Division and a return on the investment in the Coast, Bellingham and Olympic Divisions (disregarding as negligible the Idaho Division).

C. M. & St. P. Exhibit No. 5 (Record f. 294-5) shows that in 1919 there was chargeable to the log traffic on the Olympic Division the following sums for taxes and to provide a 6 per cent return upon the value of that portion of the property assigned to that traffic:

Taxes ..... $ 5,126.57

Interest on Equipment Investment 17,147.04

Interest on Road Investment 23,278.03

These items for 1920 are not shown, but obviously some amount was required for these purposes in

that year. Disregarding this Division, however, Exhibit 26 shows that a return of 6 per cent upon the value of the property assigned to the log traffic on the Coast and Bellingham Divisions in 1920 required a net return, exclusive of taxes of $334,450.00

The operating gain of $15,323 was therefore wholly insufficient to give a reasonable return.

Figuring the costs on the basis of the average revenue ton mile cost in the State, the insufficiency of the revenue provided by the Department's order, is yet more glaring.

Operating Gain	$ 42,257.00
Taxes on Coast and Bellingham Divisions	57,813.00
Deficit in amount required to pay taxes on these divisions	15,556.00

The rates prescribed by the Department are thus wholly insufficient to provide a reasonable return to the carrier on this traffic, even if the operating cost thereof be assumed to be the state-wide average ton mile cost.

The figures which have been used in the foregoing analysis of costs and revenues are unquestionably too low for the costs and too high for the revenues.

First: The cost figures are, as stated, the average ton mile operating cost—on the divisions

in the Railway Company's exhibit, and in the State on the Associated Log Shippers exhibits; while the uncontradicted testimony, heretofore referred to, shows that the ton mile cost of log transportation is above the average.

Second: The reduced revenues have been computed on the basis of the rate prescribed for cars equipped with steel bunks; and the reduction which would result from the lower rate prescribed where cars equipped with wooden bunks are used, has not been taken into consideration.

The basis of apportionment of common operating costs, taxes and property investments as between the log and other traffic was, as stated, the car mile ratio. This basis fairly represents the use of the property in the different operations; and the use made of the property is believed to be the proper basis for such segregations.

Minnesota Rate Cases, 230 U. S. 352 461.

But it is obvious that the deficit resulting from the rates prescribed by the Department is too great to be changed from a deficit to a gain by the use of any allowable method of segregating these costs. This being so the error, if error there is, is immaterial.

Minnesota Rate Cases, 230 U. S. 352, 472.

Rowland v. St. Louis & S. F. R. R. Co., 244 U. S. 106, 110.

That a statute or order by an administrative body prescribing rates which are insufficient to pay operating costs, taxes and a reasonable return upon the value of the property employed in the public service by a public utility, deprives the utility of its property without due process of law and denies it the equal protection of the law in violation of the Fourteenth Amendment, has been too often decided to be open to discussion.

Chicago, M. & St. P. Ry. Co. vs. Minnesota, 134 U. S. 418, 458.

Smyth v. Ames, 169 U. S. 466, 546-7.

C. M. & St. P. Ry. Co. v. Tompkins, 176 U. S. 167, 174.

San Diego Land & Town Co. v. National City, 174 U. S. 739, 757.

Wilcox v. Consolidated Gas Co., 212 U. S. 19, 41.

Minnesota Rate Cases, 230 U. S. 352, 434.

City of Paducah v. Paducah Ry. Co., 261 U. S. 267, 272.

State ex rel Southwestern Bell Tel. Co., v. Pub. Serv. Com., 262 U. S. 276, 287-8.

Georgia Ry. & P. Co. v. R. R. Com., 262 U. S. 625, 629.

Bluefield W. W. & Imp. Co. v. Pub. Ser. Com., 262 U. S. 679, 690.

The rule is the same where the question relates to the transportation of a special commod-

ity like logs. If it appears that the rates established therefor are insufficient to pay the costs of the transportation of such commodity, its due proportion of the taxes and a reasonable return upon the value of the property properly assignable to such transportation, they are violative of the constitutional provision.

Northern Pacific R. Co. v. North Dakota, 236 U. S. 585, 595 et seq.

Norfolk & West. Ry. Co. v. West Virginia, 236 U. S. 605, 608 et seq.

Brooks Scanlon Co. v. R. R. Com., 251 U. S. 396, 399.

Vandalia R. R. Co. v. Schnull, 255 U. S. 113, 117 et seq.

And since it clearly appears from the evidence that the rates prescribed by the Department of Public Works of Washington for the transportation of logs will not pay the costs of such transportation, the ratable proportion of taxes chargeable thereto and yield any reasonable returns to the Railway Company upon its property employed in such transportation, the order prescribing such rates conflicts with the Fourteenth Amendment to the Federal Constitution and is void.

The fact, which apparently had great weight with the members of the Washington Supreme

Court who concurred in affirming the order of the Department, that the order was for an experimental period of one year only, is wholly immaterial. The Department could not deprive the carriers of their property in violation of the constitutional provisions for a limited period any more than it could for an unlimited one.

Prendergast v. N. Y. Tel. Co., 262 U. S. 43, 49-50.

IV.

NORTH PACIFIC COAST FREIGHT BUREAU LOCAL FREIGHT TARIFF NO. 29, W. D. P. W. NO. 65.

Pursuant to the request of the Department of Public Works the carriers filed a schedule of log rates, which they were willing to accept. This schedule, North Pacific Coast Freight Bureau Local Freight Tariff No. 29, W. D. P. W. No. 65, was suspended and a hearing ordered thereon. This proceeding, which was numbered 5350, was consolidated with the general investigation proceeding; and in its order the Department canceled this schedule. (Record, p. 29.)

The rates named in this schedule, which is set forth in the Record opposite page 12, were, except for the changes necessary to name them in multiples of $.05, the same as the rates shown in

Northern Pacific Exhibit No. 47 (Record p. 185-190, f. 237-242) as those which would be necessary to secure to that company a 6 per cent return upon the values of its properties used in its log transportation, *excluding its Puget Sound Terminals.* (Testimony of Mr. Peterson, Record p. 732-750, f. 720-753). These rates were thus the minimum rates which could be considered as reasonable and sufficient for that Company.

Mr. Calderhead, Rate Expert for the Department, testified that owing to its greater net returns and volume of business, the Northern Pacific Company earned a reasonable return at a lower rate than the other plaintiffs in error could. (Record p. 753-4, f. 757-8). This testimony was uncontradicted.

And as the rates in Schedule 29 were no more than sufficient to afford a reasonable return to the Northern Pacific Company, they could not be considered as unreasonably high or excessive as to any of the other carriers.

The question of the error in canceling this schedule No. 29 will be more fully considered in a brief filed on behalf of the other plaintiffs in error.

V.

THE SUPREME COURT OF WASHINGTON FAILED AND REFUSED TO EXERCISE AN INDEPENDENT JUDGEMENT WITH RESPECT TO THE EVIDENCE ON MATTERS MATERIAL TO A DETERMINATION OF THE CONFISCATORY CHARACTER OF THE RATES ESTABLISHED BY THE ORDER OF THE DEPARTMENT OF PUBLIC WORKS.

After specifically sustaining the ruling of the Department of Public Works as to the burden of proof, the treatment of the four carriers as a single company, the use of the average per ton mile cost on the combined systems of the four carriers as a proper basis upon which to determine the per ton mile cost of the log transportation of each of the carriers individually and refusing to charge the log transportation with any of the income taxes paid by such carriers, the Washington Court said:

> "The balance of the thirty-four assignments of error involve questions of fact and those findings are controlling unless they have been arbitrarily reached without full and due consideration of all the facts or have been arrived at on a manifestly wrong basis. * * * We find that there is proper evidence to support the order of the Department of Public Works. The Court has not the authority or right to substitute itself

> for the rate making body and attempt to perform such functions. * * * *Neither is it within the province of the Court to consider the weight of the evidence* (italics supplied) or wisdom of the order."

Record, p. 56-7, f. 152-155.

It is evident from this declaration that the Court considered itself without authority to review findings of fact further than was necessary to determine whether they had been made arbitrarily or upon a manifestly wrong basis; and it must be presumed that in its review of the findings and order of the Department, it acted upon this interpretation of its power. To just what extent this assumed limitation of its powers controlled it in reaching its conclusions cannot be definitely determined. But as it made no reference in its opinion to the findings with respect to value, it must have included such findings among the thirty-four assignments of error which it declared involved questions of fact with respect to which it specifically declared it could not "consider the weight of the evidence."

But the Court erred in this declared limitation of its powers when the question presented was as to whether the rates prescribed were confiscatory. And if the Washington statute thus limits and restricts the power of the Court in such a case it is violative of the due process clause of

the Fourteenth Amendment. This has been squarely decided.

In *Ohio Valley Co. v. Ben Avon Borough,* 253 U. S. 287, the Court held the Pennsylvania Public Service Commission law violative of this Amendment, because it, as construed by the State Supreme Court, limited the power of the courts to review the findings of fact by the Commission, although such limitation was less drastic than that which the Washington Court holds must be observed under the Washington act. Reversing the decision of the State Supreme Court, this Court there said:

> "In all such cases, if the owner claims confiscation of his property will result, the State must provide a fair opportunity for submitting that issue to a judicial tribunal for determination upon its own independent judgment as to both law and facts; otherwise the order is void because in conflict with the due process clause, Fourteenth Amendment." (P. 289.)

See also: *Bluefield W. W. & Imp. Co. v. Pub. Serv. Com.*, 262 U. S. 679, 689.

By refusing to consider the weight of the evidence and thus refusing to exercise its independent judgment upon such material matters as the property values, the Court denied the plaintiffs in error their constitutional right to a judicial review of the Department's order.

VI.

THE RATES PRESCRIBED ARE FIXED UPON A CONSIDERATION OF THE INTERSTATE BUSINESS OF THE PLAINTIFFS IN ERROR AND ARE THUS VIOLATIVE OF THE COMMERCE CLAUSE OF THE FEDERAL CONSTITUTION.

The Supreme Court of Washington sustained the action of the Department in using the average system ton mile cost of transportation as the basis upon which to determine the ton mile cost of the log transportation, upon the following grounds:

> "It must be conceded that intermediate divisions of transcontinental systems where such divisions originate little traffic, would be almost devoid of traffic were it not for originating and terminal divisions and the relations between intrastate and interstate commerce are interdependent so far as receipts and expenses are concerned.
>
> * * *
>
> "We are satisfied that the board of public works proceeded upon a fundamentally right basis in determining that the costs of the entire system should be taken into consideration in determining the cost in the state of Washington since interstate and intrastate commerce are interdependent upon each other. One could not exist extensively without the other."

Record, p. 55, f. 150-1.

The court made no attempt to perform the impossible task of justifying the use of the average system unit of cost for the purpose of determining the unit of cost of the log transportation upon the basis of any evidence that such cost units were the same. It evidently recognized that there was no such evidence, declined to enter upon so futile a task, and justified the use of the interstate cost unit as the unit of cost of the intrastate transportation as above stated. Its decision is, in effect, that a low intrastate rate may be enforced because of interstate business "since interstate commerce and intrastate commerce are interdependent upon each other."

But in *Smyth v. Ames*, 169 U. S. 466, 540-2, this Court definitely decided that intrastate rates could not be made upon the basis of the interstate commerce of the carrier. Where low intrastate rates are established upon a consideration of the carrier's interstate operations, the interstate commerce is necessarily burdened to make up any deficit thus created, since the carrier is entitled to a reasonable return upon its business as a whole. The intrastate rate thus indirectly affects and may be a material burden upon the interstate commerce. And if the state legislature or rate prescribing body may make

intrastate rates upon such considerations, they can and necessarily will regulate interstate commerce in violation of the exclusive power to regulate commerce between the states conferred upon Congress by Section 8, Article I of the Federal Constitution.

CONCLUSION.

Other matters involved in the assignment of errors are discussed in a brief prepared on behalf of the Northern Pacific, Great Northern and Oregon-Washington Companies jointly. It is unnecessary to repeat in this brief what is there said. But we ask the Court to consider such matters, in so far as they are properly applicable to this Company, as if specifically embodied herein.

For the reasons heretofore stated we submit that the judgment of the Supreme Court of Washington shold be set aside.

F. M. DUDLEY,
Attorney for the Chicago, Milwaukee & St. Paul Railway Company.

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Of Counsel.

Office Supreme Court
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WM. R. STAIN

In the

Supreme Court of the United States

OCTOBER TERM, 1924

No. 371

NORTHERN PACIFIC RAILWAY COMPANY, ET AL,
Plaintiffs in Error,

vs.

DEPARTMENT OF PUBLIC WORKS OF WASHINGTON, ET AL,

Defendants in Error.

In Error to Supreme Court of the State of Washington

Brief for

Northern Pacific Railway Company
Great Northern Railway Company
Oregon-Washington Railroad & Navigation Company

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Brief for

Northern Pacific Railway Company
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Oregon-Washington Railroad & Navigation Company

PRELIMINARY STATEMENT

This is a writ of error to the supreme court of the State of Washington to review a judgment which affirmed a judgment of the superior court of Thurston County, dismissing a petition for the review of an order of the Department of Public Works, prescribing a reduced schedule of log rates, new rules and regulations concerning the transporta-

tion of logs, and cancelling an advanced schedule of log rates filed by the plaintiffs in error.

Statutes of the State of Washington (Act of 1911 Ch. 117) create a public service commission with the usual powers of regulation and control. A later enactment, Laws of 1921, p. 20, vests these powers in a Department of Public Works. Remington's Comp. Stat., §§ 10339-10459, 10778-10785. The general nature of the law is adequately described in *State of Washington ex rel O. R. & N. Co. v. Fairchild*, 224 U. S. 510.

Sec. 10345 Rem. Comp. St. provides that charges of common carriers shall be "just, fair, reasonable and sufficient." Sec's. 10356 and 10357 prohibit "unjust discrimination" and "unreasonable preference." Sec. 10422 provides that complaint may be filed by the commission, now Department, of its own motion concerning anything done or omitted by the carrier in violation of the act. Sec. 10423 provides for a hearing and findings and order. Sec. 10428 provides for a review in the superior court where the corporation may have the "reasonableness and lawfulness" of the order inquired into and determined, *but only upon the record made before the department.* Sec. 10424 provides that whenever the carrier shall file a schedule of ad-

vanced rates the department may enter upon an inquiry as to its reasonableness, and pending the inquiry may suspend the rates. The burden of sustaining the advanced schedule is on the carrier. If condemned by the department no supersedeas is allowed pending the court review. Under Sec. 10429 the department's order may be superseded in other cases by the superior court upon an appropriate showing of irreparable injury and giving of bond to refund the excess charges should the reduced rates be sustained. By Sec. 10430 an appeal to the supreme court is allowed and a further supersedeas under the same conditions.

Pursuant to these statutes the public service commission of its own motion, on Dec. 30, 1920, filed a complaint before itself against the Northern Pacific, Great Northern, Chicago, Milwaukee & St. Paul and Oregon-Washington Railroad & Navigation Company, alleging that certain tariffs mentioned in the complaint "contain rates and charges, rules and regulations for the transportation of logs within the state of Washington, which rates and charges, rules and regulations are excessive, unreasonable, discriminatory and preferential." That in its order making effective Ex Parte 74 advanced rates in this state, in cause No. 5092, dated Aug.

17, 1920, it called attention to the discriminatory character of said tariffs, and requested the carriers to file new tariffs that would be reasonable and non-discriminatory. That a reasonable time has elapsed but new tariffs have not been filed. "Therefore, the commission will . . . . . enter upon a hearing concerning the matters and things herein set forth and . . . . . make such order as the facts found warrant." (Trans. p. 1.)

The cause was heard on April 13th, 1921, and continued from time to time. The carriers appeared and so did the interested log shippers under the name of "Associated Loggers."

During the progress of the cause the carriers were requested by the commission to submit a schedule of log rates they would be willing to accept, it being their contention that the existing scale was inadequate and should be advanced. *An advance of the rates* as well as a reduction *was within the scope of the issues*, as defined by the director, E. V. Kuykendall, at the commencement of the hearing. It was the stated purpose of the commission, as a result of the inquiry, to prescribe reasonable log rates, by way of revision "*up* as well as down." (Trans. p. 344.) Accordingly at the close of the hearing the carriers submitted their

tariff, S. J. Henry's No. 29, naming higher rates than those in effect. The tariff was suspended, the suspension docket consolidated with the main case, and it was stipulated that the evidence in the main case should be the evidence in the suspension case, and both determined by the final order to be rendered herein. (Finding 3, Trans. 20.)

On Feb. 21, 1922, the Department made its findings and order in the consolidated cases (Trans. 19), prescribing a distance scale of log rates for the four carriers on the average about 20% below the existing scale. The loss of revenue to the carriers from the reduced scale was found by the superior court on the hearing of the application for supersedeas pursuant to Sec. 10429 to be for the C. M. & St. P. $271,000 per annum, for the Northern Pacific $200,000, for the Great Northern $120,000, and for the Oregon-Washington R. & N., $40,000. (Trans. 49.)

Comparing these annual losses with the annual log revenues of the several lines (Trans. opp. p. 88) it is seen that the respective percentage reductions are:

Great Northern	37%
C. M. & St. P. R. Co.	27%
O.-W. R. & N. Co.	20%
Northern Pacific	15%

The reductions *per car* are greatest for the Great Northern and least for the Northern Pacific, due to the former's log rates being substantially higher than the latter's.

The findings and order also prescribe a new basis for computing minimum loads, substituting the average loading of all cars tendered at one time for the single car. This is an unprecedented feature. It is said in Finding XXV that the new rule will reduce total revenues of the four carriers about 6% or $150,000 per annum. The loss to any particular carrier does not appear. By Finding XXIII it is provided that for cars not equipped with a patent loading and staking device the minimum will be 500 feet less than for cars so equipped, and the order prescribes a rate 50c less per car therefor. This is also an unprecedented feature. The loss of revenue therefrom cannot be computed, but will be considerable. The Associated Loggers attached great importance to this feature at the hearing.

By Finding XXI the carriers' advanced schedule of log rates prescribed by Tariff 29 is condemned and it is cancelled by the order.

It is finally ordered that the reduced schedule and new rules shall be in effect "during an experi-

mental period of twelve months . . . . or until the further order of the department."

In due time the plaintiffs in error sued out a writ of review to the superior court of Thurston County, contending that the order is confiscatory, not supported by the evidence, and contrary to the Fourteenth Amendment to the Federal Constitution. (Trans. 32-46.) A supersedeas of the reduced rates was allowed (Trans. 49), but no supersedeas was or could be allowed of the order cancelling the advanced rates of Tariff 29. On September 25, 1922, the superior court affirmed the order. An appeal was taken to the state supreme court and a further supersedeas was allowed. (Trans. 51.) In that court the carriers renewed their claims under the Fourteenth Amendment. On the 18th day of July, 1923, the judgment was affirmed. (Trans. 52-62.) Petition for rehearing was denied November 20th, 1923. On November 28th, 1923, writ of error was applied for and allowed, together with a supersedeas of the reduced rates. The case is in this court under Sec. 237 Judicial Code as amended. *Bluefield Waterworks v. Public Service Commission*, 262 U. S. 679.

ASSIGNMENT OF ERRORS

The assignment of errors renews in this court the federal questions, and complains of the denial of a fair return on the value of the carriers' property devoted to log transportation, contrary to the due process clause of the Fourteenth Amendment. (See Assignments IV to IX, Trans. 66, 69.)

An additional assignment of error complains of a denial of due process of law in the affirmance of an order based upon findings made without evidence. (Assignment 10, Trans. 69.)

The last assignment of error complains of a denial of due process of law to the Oregon-Washington Railroad & Navigation Company in refusing to consider or allow anything for the amortization of the investment of that company in one of its important log-carrying branches. (Assignment XIII, Trans. 69.)

The detailed assignment of errors follows:

I.

The Supreme Court of Washington erred in holding and deciding that the burden of proof was on plaintiffs in error to show that the rates and

charges applicable to the transportation of logs were not unjust, unreasonable and unjustly discriminatory, and in affirming the order of the Department of Public Works so placing the burden of proof upon the plaintiffs in error, and thereby the property of plaintiffs in error and each of them was taken without due process of law, and they are and each of them is deprived of the equal protection of the laws in violation of the Fourteenth amendment to the Constitution of the United States.

II.

The Supreme Court of the State of Washington erred in refusing to reverse and set aside the order of the Department of Public Works of said state, for the reason that said order placed upon the plaintiffs in error the burden of proof to show that the rates and charges applicable to the transportation of logs were not unjust, unreasonable and unjustly discriminatory, thereby causing an undue and unreasonable advantage, preference and prejudice as between persons and localities in intrastate commerce on the one hand and interstate commerce on the other hand, and undue, unreasonable and unjust discrimination against interstate commerce, contrary to the commerce clause of the Constitution

of the United States and contrary to Section 13 of the Interstate Commerce Act as amended by the Transportation Act of 1920.

III.

The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works, for the reason that in and by said order the Department cancelled the schedule of advanced rates applicable to the transportation of logs prescribed by the Interstate Commerce Commission in its decision in Ex Parte 74, 58 I. C. C., page 220, and thereby caused an unjust and unlawful discrimination against interstate commerce and a corresponding preference and advantage to intrastate commerce, in violation of the commerce clause of the Constitution of the United States and of Section 13 of the amended act to regulate interstate commerce, and deprives plaintiffs in error and each of them of a fair return on the value of their property awarded by the Interstate Commerce Commission pursuant to the provisions of section 15-A of said amended act to regulate commerce.

IV.

The Supreme Court of the State of Washington erred in affirming the order of the Department of

Public Works prescribing a schedule of rates for the transportation of logs in the State of Washington, for the reason that said Department of Public Works incorrectly and inadequately determined the cost of said transportation by using a fundamentally erroneous theory in such determination, and thereby plaintiffs in error and each of them were deprived of just compensation for the transportation service rendered, and the property of each of them was taken without due process of law, and they and each of them were denied the equal protection of the law, in violation of the Fourteenth Amendment to the Constitution of the United States.

V.

The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works prescribing a schedule of rates for the transportation of logs in said state, for the reason that said Department of Public Works incorrectly and inadequately determined the value of the property of plaintiffs in error and each of them, devoted to said transportation, by adopting and using a fundamentally erroneous theory for the determination of such valuation, and thereby deprived the plaintiffs in error and each of them of

their property without due process of law, and denied them the equal protection of the law, contrary to the Fourteenth Amendment to the Constitution of the United States.

VI.

The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works, for the reason that said order inadequately apportioned ad valorem taxes to the property devoted to the transportation of logs and refused to allow anything for federal income taxes, and thereby deprived plaintiffs in error and each of them of a just return on the value of their property, contrary to the Fourteenth Amendment to the Constitution of the United States.

VII.

The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works of said state prescribing a schedule of rates for the transportation of logs in the State of Washington, for the reasons:

(a) That the said Department of Public Works in fixing said rates failed and refused to consider the values of the properties of the several plaintiffs in error employed in said transportation.

(b) That said Department of Public Works in fixing said rates failed and refused to consider the several costs to such plaintiffs in error of such transportation.

(c) That said Department of Public Works ordered each and all of the plaintiffs in error to adopt and observe a schedule of log rates in the State of Washington which is concededly not based upon the separate valuation or cost of operation of any of the corporate plaintiffs in error, but upon the assumed aggregate valuation and the assumed average cost of operation of all the corporate plaintiffs in error.

Thereby each of said plaintiffs in error is deprived of its property without due process of law and denied the equal protection of the law, in violation of the Fourteenth Amendment to the Constitution of the United States.

VIII.

The Supreme Court of the State of Washington erred in refusing to reverse and set aside the order of the Department of Public Works fixing said schedule of log rates in the State of Washington, for the reason that said Department of Public Works ignored the evidence as to the value of the

property and cost of operation of each of plaintiffs in error at the places and upon the lines where the log service is performed by it, but based its order establishing said schedule of rates upon findings as to the assumed average cost of operation upon the combined systems of said corporate plaintiffs in error and as to the assumed combined valuation of the property of the corporate plaintiffs in error in the entire State of Washington.

IX.

The Supreme Court of Washington erred in affirming the order of the Department of Public Works, for the reason that the said order prescribes a schedule of log rates which does not pay the cost of the traffic to which it applies plus a fair return on the value of the property devoted thereto, and thereby the property of plaintiffs in error and each of them is taken without due process of law and they are deprived of the equal protection of the law.

X.

The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works, for the reason that the said order is based upon findings of fact which are not sup-

ported by any evidence and which are contrary to the undisputed evidence contained in the record of this case.

XI.

The Supreme Court erred in affirming the order of the Department of Public Works which cancelled Tariff No. 29 prescribing a schedule of advanced log rates no higher than plaintiffs in error and each of them are entitled to for the transportation of logs, and thereby plaintiffs in error and each of them are deprived of their property without due process of law and denied the equal protection of the law, in violation of the Fourteenth Amendment to the Constitution of the United States.

XII.

The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works of the State of Washington in establishing a rate for the transportation of logs in said State, for the reason that said rate was established as an experimental rate only for the purpose of determining whether such rate would or would not be sufficient, and thereby the corporate plaintiffs in error and each of them were denied the equal protection of the law and deprived of their prop-

erty without due process of law, in violation of the Fourteenth Amendment to the Constitution of the United States.

XIII.

The Supreme Court of the State of Washington erred in affirming the order of the Department of Public Works as it peculiarly affects plaintiff in error, Oregon-Washington, Railroad & Navigation Company, for the reason that the Department refused to consider or allow anything for the amortization of the investment of said company in what is known as its North River Branch in this state, and thereby said company was deprived of its property without due process of law and denied the equal protection of the law, in violation of the Fourteenth Amendment to the Constitution of the United States.

(Trans. pp. 66-69.)

FIRST

The schedule of reduced log rates prescribed by the department and sustained by the state courts is confiscatory, and takes the property of plaintiffs in error without due process of law, contrary to the Fourteenth Amendment.

The Northern Pacific was the pioneer line in the Pacific Northwest. It was completed across the Cascade Mountains to Puget Sound in 1887. The traffic was almost entirely west bound. In order to develop east bound tonnage the company sold its timber lands under contracts which bound the purchasers to erect lumber mills and ship the product East over its line. An extremely low log rate was necessary to develop an infant industry in competition with the Middle West. The earliest and most important of these contracts was with the St. Paul & Tacoma Lumber Company, and provided for a log rate of $1.00 per thousand feet for a haul of about 25 miles. It became the measure of all succeeding log rates and was duly published in 1905 when regulatory laws became effective in the State of Washington. Because of the morally binding effect of these contracts, the extremely low rates were maintained up to federal control. (Capron, Trans. 482; Albee 558; Plummer 693. Department's "History" Trans. 19.)

The logging and lumbering industry has grown from nothing in 1888 to immense proportions, especially on the lines of the Northern Pacific and Milwaukee. Of the traffic of the former company (intrastate) logs amounted from January to

August, 1920 (a representative period) to 71,785 carloads as compared with 66,421 carloads of all other intrastate traffic. Tonnage of logs 2,296,643 and all other carload traffic 2,249,664. (N. P. Ex. 19, Trans. 106.) It will be seen, therefore, that the department was dealing with about half of the total carload traffic of that company over which it had jurisdiction, and much more than half on the lines where logs move. That the log rates must have been on an extremely low level is indicated by their origin. That they are so in fact is demonstrated by this record. It is equally true to say that a confiscatory rate on this immense volume of traffic will seriously cripple these companies, especially the Northern Pacific and Milwaukee. The carriers do not and are not permitted to make up the loss from their other intrastate traffic, the net results of which are admittedly at a low ebb. (N. P. Ex. 50, Tr. 195, Calderhead Tr. 751, Assoc. Log Ship. Ex. 4, line 14, Tr. opposite p. 88.)

This brief is submitted in behalf of the Northern Pacific, Great Northern and Oregon-Washington R. & N. Co. It will deal with the Northern Pacific principally. The log traffic on the Great Northern is about 22,000 cars per annum and on the Oregon

Company about 16,000 per annum, as compared with about 102,000 cars for the Northern Pacific. If that company prevails in its contentions the other two necessarily will prevail, because the department's expert testified that any scale of rates reasonable for the Northern Pacific are less than reasonable for the other carriers. The Northern Pacific can stand a greater reduction of rates than the other roads. (Calderhead, Trans. 753.) H. L. Gray, expert for the Associated Loggers, finds the volume of traffic, revenues and operating expenses for the Northern Pacific to confirm Calderhead's testimony. (Associated Log. Ship. Ex. 3, Trans. 87; Ex. 3-A, Trans. 89.)

We now come to consider the evidence relied on by the carriers to sustain their claim of confiscation.

It is substantially true to say that log traffic is confined to that part of Washington west of the Cascade Mountains. As illustrative of the log movement on each of the lines we print herewith a map of the Northern Pacific system in Washington. The red line is the main line over which logs move; the yellow lines are the branch lines over which logs move. These lines comprise the Seattle and Tacoma divisions. The dotted red line is the

so-called "Puget Sound Terminal" division, or the "Puget Sound terminal," comprising the elaborate and expensive terminals at Tacoma, Seattle and Auburn, the latter being the junction point of the main East and West line with the Puget Sound division. The black lines comprise the balance of the system in the state. The lines of the Milwaukee, Great Northern and O-W. R. & N. Co. over which logs move are in the same general territory West of the Cascades and West of Ellensburg as the red and yellow lines of the Northern Pacific. There is, however, a small movement on the Great Northern north of Spokane in Eastern Washington. (G. N. Ex. I, folio 369.)

A—N. P. Ry. Co. Cost of Log Transportation.

Northern Pacific exhibits 15 and 16 are preliminary to the principal exhibit, No. 17. This exhibit is intended to show the cost of transporting logs on the Seattle and Tacoma divisions *to which the movement is confined.* It covers the months of September, October and November, 1920, a period most favorable to developing a low cost, because of the heavy movement in the fall months.

We suggest that the court read Peterson's testimony, with exhibit No. 17 before it, and we think

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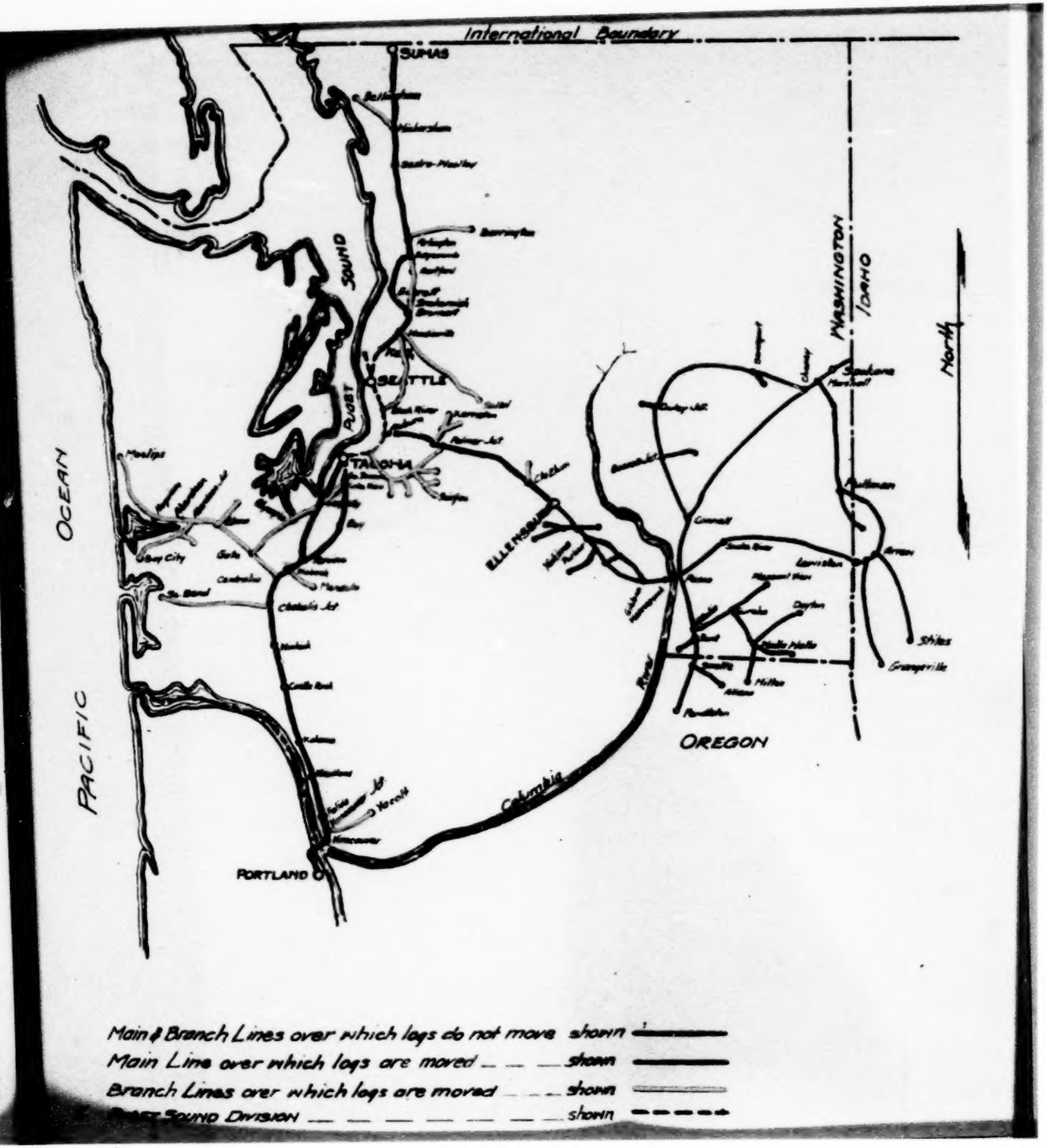

that the method adopted by this company to show the cost of log transportation will be easily understood. (Trans. p. 517, etc., Ex. 17, p. 100.)

The first item in the exhibit is "Total station service, $309,874," and represents the actual cost of station service (freight proportion) for Seattle and Tacoma divisions, main line, for September, October and November, 1920. The freight proportion is obtained by dividing the total expense between freight and passenger traffic by what the witness calls "the Northern Pacific method." This method is substantially the same as the method prescribed by the Interstate Commerce Commission, but is more favorable to freight traffic than the Commission's method, and so, to that extent, favors the contention of defendants in error. The first column headed "Incl. Puget Sound Terml." includes the station expense on what is known as the "Puget Sound Terminals," or "Puget Sound Division," which is the entire main line between South Tacoma and Keith, just north of Seattle. (See the map.) The second column headed "excl. Puget Sound Terml." states the expense excluding the terminal division mentioned. The terminal expense is segregated because of a contention of defendants in error that log traffic should not partici-

pate in the cost of the expensive terminals in the large cities of Seattle and Tacoma, because log traffic does not use these terminals as largely as other traffic.

The next column headed "Per estimated loaded car mile," is the expense divided by the estimated loaded car miles, so that a total station expense of $309,874 equals 5.24 cents per estimated loaded car mile. The next item is "total yard service," main line, $445,884, or 7.54 cents per estimated loaded car mile. And so on with each item of expense. The total transportation expense actually incurred for the three months on the main line is shown to be $1,188,472, or 20.09 cents per estimated loaded car mile. Then follows the maintenance expense of equipment, road and structures, traffic and general. These are the accounts prescribed by the Interstate Commerce Commission for use by the carriers and each item of expense is assigned to the appropriate account. This is undisputed. The total main line expense, including Puget Sound terminals, is $2,053,484, or 34.71 cents per estimated loaded car mile. Excluding the Puget Sound terminal expense, it is $1,041,057, or 17.60 cents per estimated loaded car mile. The extreme right hand column shows the same information in detail

for branch lines, and the total branch line expense is $983,657, or 35.52 cents per estimated loaded car mile. No column excluding the terminal expense is carried for branch lines, because the terminals are on the main line. It is to be noted that the branch line expense per car mile is in excess of the main line, although the latter includes the expensive terminals at Tacoma, Auburn and Seattle. Excluding those terminals the branch line expense is more than twice main line per car mile.

Next on exhibit No. 17, towards the bottom of the page, is shown the *actual* loaded car miles of *all* freight on main line of 5,041,526 and *actual* empty car miles on main line of 1,748,362, or a total loaded and empty of 6,789,888. The loaded and empty *actual* branch line miles are next shown at 3,474,929. In order to include the expense of the empty haul, it is customary to count two empties as equal to one load in expense (see Peterson, Trans. p. 521.) One-half the empty car miles on main line are 874,181, and, added to the loaded car miles, equals 5,915,707, and the result is the "estimated loaded car miles"; that is the actual loaded plus half the actual empty car miles on main line. The branch line miles are computed in the same way and amount to 2,769,418 estimated loaded car

miles. So that, for an expense of $2,053,484 this company produced the main line estimated loaded car miles as stated, and for $983,567 the branch line miles, as stated, during the three months period (see Peterson's testimony, Trans, p. 517 et seq).

If the expense of the Puget Sound Terminals be excluded entirely, by which is meant the entire expense, except the actual cost of trainmen's wages and fuel for road runs, the main line cost is $1,041,-057, as shown in the column headed "excl. Puget Sound Terml.," instead of $2,053,484 as shown in the column headed "incl. Puget Sound Terml."

Having thus found the total expense of *all* freight traffic for the three months' period on the Seattle and Tacoma divisions, main and branch lines, separately stated, including and excluding the terminal expense, the next step is to assign to log traffic its proportion.

Log Proportion of Cost

The loaded cars of logs moved during the three months was 25,215, and the average haul 32.2 miles. Multiplying the car movement by the average mileage gives 811,923 loaded car miles of logs on main and branch lines. Then adding one-half

the empty miles to get the cost of the empty movement gives 1,217,884 "estimated loaded car miles" of log traffic. But, as shown, the expense on main line is different from expense on branch line, so main and branch line mileage is shown separately. The main line mileage is 302,888, or 24.87%, and branch line mileage is 914,996, or 75.13%. *It will be seen, therefore, that any controversy as to terminal expense is limited to* 24.87% *of the traffic.* Then the cost of main line traffic, including Puget Sound terminal, at 34.71 cents per estimated loaded car mile is multiplied by the main line log car mileage of 302,888 and equals $105,132.42 as main line expense of *log* traffic for the three months. Excluding the terminal the cost is $53,308.29. The branch line log miles of 914,996 are multiplied by branch line cost of 35.52 cents per estimated loaded car mile and equals $325,006.58 as branch line cost. The total cost of log traffic is $430,139.00 (including the terminal expense) and is the log traffic proportion of total cost of all freight traffic for the three months on the two divisions, but without taxes or interest.

Revenue and Net Result.

The last step is to find the revenue earned by logs. The exact sum taken from the record is

$376,871.79. The revenue subtracted from the expense of $430,139, leaves a net operating loss, without taxes or return on the investment, of $53,-267.21, including the terminal division, or $1,443.08 if the terminal expense be entirely excluded.

It was shown, however, that logs actually moved on the terminal division to the extent of 15.48% of the total traffic, and therefore it is certain that logs should participate in the terminal cost to that extent, and our figures including the terminals have charged against log traffic no greater proportion. (Trans, p. 530.)

N. P. Exhibit 18.

This exhibit was also submitted by Mr. Peterson (Trans. 535). The freight and passenger common expenses are assigned here according to the Interstate Commerce Commission rule, and the statement covers the entire year 1920. Otherwise it is made the same as Exhibit No. 17.

The total expense of *log* traffic shown on Exhibit 18 for the year 1920 is $1,848,209.80, including the terminals. The total revenue from log traffic is $1,308,875. The net operating loss, without taxes or return on the property, is $539,334.48. Excluding the terminal expense, the net loss is $318,047.24. (See Ex. 18, Trans. 103.)

The difference in the ratio of loss for the year, of $539,334 and $53,267 for the three months, is explained by considering that September, October and November are the months of greatest traffic density, when unit operating costs are always lowest.

LOG TRAFFIC IS MORE COSTLY THAN AVERAGE.

It is seen that the Northern Pacific Company in computing the expense of log traffic, has assigned to that traffic the average cost of all freight traffic on the two divisions, including logs. This assumes the same cost of log traffic as for freight traffic as a whole.

We then follow up with proof that the cost of log traffic is greater on each line than the average of all other freight traffic. Some reasons for this are shown by uncontradicted evidence to be as follows:

(a) The log traffic on all lines has a much shorter haul than the average freight traffic. On the Northern Pacific the average haul of logs is 32 miles, as compared with an average haul of all other Washington intrastate traffic of 99 miles and all state and interstate traffic in Washington of 142.24 miles, and all freight traffic on the system as a

whole of 334 miles. (Peterson, Trans. p. 532.) On the Great Northern the log haul averages 32 miles. (Trans. fol. 510) and all system freight traffic averages 160 miles, and all freight traffic on the system 259 miles. (Trans. p. 813.) On the O.-W. R. & N. the average haul of logs is 15 miles (Trans. p. 86), all Washington freight traffic 106 miles (Trans. fol. 510) and all system freight traffic 240 miles. (Trans. fol. 509.) On each movement of logs there are, of course, two terminal handlings, the same as are incurred on each other shipment of much greater average length. Many of the operating expenses are constant, regardless of the length of the haul. The assignment to the log traffic, therefore, merely of the average freight operating expense understates the expense of handling logs very considerably, because it assigns to the log service but a fraction of the constant expense incurred in that service, the fraction being represented by the ratio of the log haul to the average haul of the other traffic. *Shepard v. Northern Pacific R. Co.*, 184 Fed. 765, 781.

(b) On the Northern Pacific 75.13% of the total log traffic is on branch lines, where the cost is about twice as great per unit of freight as on the main line, due to lesser traffic density. On the entire

Northern Pacific system main line cost is 15.85c per car mile, while on the branch lines it is 36.89c. (Peterson, Trans. 711, Northern Pacific Exhibit 37.) On the Great Northern a three-months study disclosed that about two-thirds of the entire Washington log traffic moved on branch lines, and that the expense on the branch lines was about 32.78c per loaded car mile, as compared with 24.93c per loaded car mile on main lines. (Great Northern Exhibits 16 and 18, Add'l. Trans. p. 23.)

(c) On the Northern Pacific log traffic is entirely confined to the Seattle and Tacoma divisions, and so incurs two terminal costs on those divisions, while the bulk of other traffic on the divisions is either interstate or moves from or to the divisions and so incurs only one terminal expense reflected in the cost figures for those divisions.

(d) The cost of repairing log cars is at least three times as high per car mile as that of other cars. An actual test made by the Great Northern to determine the cost of repairs to the cars in its two most important logging operations showed 12.3c per loaded car mile. (Trans. p. 618.) These cars went to a log dump where particularly destructive unloading methods were used. (Trans. p. 612.) The average cost of repairs to all freight cars in the

state for one year was about 3.5c per loaded car mile. (Great Northern Exhibit 9, Item 314, Trans. p. 275; Great Northern Exhibit 10, Items 51 and 61, Trans. pp. 279, 280.) On the Tacoma Division of the Northern Pacific in 1920 30% of all log cars went to the repair tracks, as compared with but 7.1% of other cars. (Trans. p. 573.)

(e) 4.3 cars must be kept in service to handle each load of logs. (Albee, Trans. p. 567.) M. Nicholson, General Manager of the Milwaukee, showed that on the Coast Division of that line all cars moved 38 miles per day in September, 1920; in October, 37.6 miles; in November, 45.6 miles. At the same time log cars moved but 6.39, 10.13 and 9.66 miles, respectively. (Trans. p. 400.) Great Northern Exhibit 15 (Trans. p. 289) shows that in one month cars in log service made an average daily mileage of 5.4 miles, as compared with an average mileage of 28.3 miles per day for all freight cars. Each car in the logging service is non-revenue producing three days out of every four. (Trans. p. 374-6.)

(f) The empty log car mileage is at least 50%, while other traffic has a ratio of only 35%. (Trans. pp. 289, 558.)

Justice Fullerton's dissenting opinion emphasizes the extra cost of log traffic over that of traffic in general due to these peculiarities. (Trans. 58.)

As an operating man of long standing, W. C. Albee testified in detail to the abnormal cost of log traffic and the reasons therefor. His testimony was not contradicted or questioned. (Trans. p. 558, Mount, Tr. 460-62 gave similar testimony.)

Operating Costs in 1921.

In the Department's Finding No. VII it is said that "all operating cost exhibits were confined to the year 1920, during which year the peak prices for labor and material were reached. Since 1920, there has been a marked decline in labor and material costs. As near as can be determined, the unit cost of railroad operation at the present time is approximately 20% less than the unit costs of a year ago." In Finding VIII a considerable part of the 1920 cost is attributed to the empty car movement due to the bringing of cars to the home line after Federal control. But Finding VIII is erroneous and immaterial for the reason that all cost figures used were the costs of the western Washington divisions, which could not be affected

by bringing empty cars from a foreign line to the home line. Finding VII is contrary to the evidence, for the Northern Pacific produced Exhibit 42 (Trans. p. 177, Peterson, Trans. p. 723), from which it appears that traffic had so fallen off in the first six months of 1921 that *unit* operating costs were as high as in 1920. Of course traffic density is a controlling factor, as is admitted in the Department's Finding XX. For 1920 the total cost of log traffic on the Northern Pacific has been shown as $1,848,209 in Exhibit 18. For the first six months of 1921 the cost of log traffic was $569,028, or at the rate of $1,138,056 for the year. (At the time of the hearing no later figures were available). But in 1920 total log car miles were 4,788,892, while for the first six months of 1921 they were but 1,529,874, or at the rate of 3,059,748 for the year. (See Exhibits 18 and 42, Trans. p. 103, 177). Comparing the branch line expense, where 75% of log traffic moves, it appears that in 1920 it was 38.82 cents per estimated loaded car mile, and 38.05 for the first six months of 1921. (Ex. 42, Trans. 103,177). The Great Northern also introduced cost statistics, based entirely on 1921 prices, in its Exhibit 23 showing actual cost of the Gold Bar-Everett movement, which is the same as was involved in the case

of *Public Service Commission v. State ex rel. Great Nor. Ry. Co.*, 118 Wash. 629, 204 Pac. 791, 207 Pac. 688. In that exhibit is shown a net operating loss of $51,321, and if interest and taxes were added, the loss would be $167,861. (Turnburke, Trans. p. 792.) The cost figures were for the year *1921*. This loss was incurred by the Great Northern, notwithstanding its higher rate of $2.27 per thousand feet for a 30 mile run, as compared with the Northern Pacific rate of $1.64 per thousand feet, and the Great Northern's movement was on the main line, whereas the Northern Pacific movement is 75% branch line.

But, even if the costs for 1920 were abnormally high, the department could not disregard them, since it filed the complaint of its own motion and itself chose the time for the investigation. Having itself filed and prosecuted the complaint, it was bound to rest its decision upon the conditions existing as of the date of the investigation. *State ex rel O. R. & N. Co. v. Fairchild*, 224 U. S. 510; *State v. R. R. Com.*, 60 Wash. 218, 110 Pac. 1075; *Smyth v. Ames*, 171 U. S. 361. It could not lawfully disregard the evidence and speculate upon the future. *Rowland v. Boyle Co.*, 244 U. S. 106.

Summarizing the Northern Pacific Company's method of showing the cost of log transportation, it appears that we ascertain the cost of all transportation on the two divisions where logs move, divided as between main and branch line, *and assigned to logs the average cost of all freight traffic per estimated loaded car mile*, thus assuming that log traffic is not more expensive than the average of all traffic on the two divisions. This assumption was then *fully justified* by uncontradicted proof that in fact log traffic is much more expensive than the average of all freight traffic on the two divisions. We also show separately the cost, excluding and including the terminal costs, concerning which some question was raised by respondents.

The witness Peterson explains (Trans. p. 521 et seq) the method by which he assigned to freight and passenger and to the particular divisions in question the directly assignable expense and how he prorated to the freight traffic the common expenses. There was no objection to or criticism of the manner in which these expenses were assigned. For instance, enginemen service-train includes all the items shown for engine service, chargeable directly to freight and for mixed service, the car

mile proportion, which is 80% freight and 20% passenger. "Train enginemen," "Fuel for Train Locomotives," "Water for Train Locomotives," etc., is the freight proportion assigned directly in all cases, except in case of mixed trains, where it is on the basis of 80% and 20% freight and passenger respectively. The item "Total Engine Service" of $249,695 is obtained in the same way as the station service item. The item of "Total Casualties," $46,097.00, represents clearing wrecks, loss and damage to freight, etc. That is directly assigned to freight, except where mixed trains are involved, in which case it is 80% freight and 20% passenger (Trans. p. 521). The item shown as "Other Accounts" includes operating joint track facilities, debit and credit, etc. The amounts directly assignable to freight are so assigned, but in the case of other accounts shown under the heading "Miscellaneous" the charges are common and apportioned to freight service on the basis of train mileage.

The items "Repairs of Freight Cars," "Shop Machinery," "Superintendence," etc., totalling $364,582.00, is the maintenance of equipment. Items such as repairs to freight locomotives, freight cars and injuries to persons are directly assigned

to freight. Repairs to freight cars are assigned to freight. Shop machinery is assigned to freight on the basis of train mileage. Superintendence is apportioned on the basis of locomotive mileage; that is, in proportion to the number of miles the freight service bears to the number of miles of passenger service. The item "Total Maintenance of Way and Structures" of $449,230.00, includes all accounts as reported to the Interstate Commerce Commission covering maintenance of way and is the freight proportion. These expenses are mostly common and are apportioned to freight on the basis of locomotive mileage, viz.: the number of locomotive miles made over the tracks in the freight service as compared with locomotive miles in passenger service. The present plan in reporting road maintenance to the Interstate Commence Commission calls for separation based on fuel for train locomotives, but the Northern Pacific basis has been used for a number of years. It is used by the Great Northern, Northern Pacific and Burlington. The Interstate Commerce Commission apportions these expenses on the basis of the actual value of the fuel used by locomotives in train service.

The item "Total Traffic Expense" of $13,654.00, covers expense of the traffic department. The

common charges under General Expense of $37,-546.00 are assigned to freight on the basis of train mileage percentages in the freight and passenger service. (Trans. p. 526.)

G. N. RY. CO.
COST OF LOG TRANSPORTATION

The Great Northern has a higher operating expense in Washington per unit of freight handled than any of the other plaintiffs in error. The 1920 operating costs per 1,000 gross ton miles were as follows:

	Entire System	State of Washington	Average Log Rate for 25 to 30 miles
Northern Pacific	$4.23	$5.51	$1.64
Great Northern	4.48	6.97	2.92
C. M. & St. P.	4.55	6.11	2.27
O.-W. R. & N.	5.43	6.61	2.03

(Trans. p. 89.) As a result of its higher operating cost, Great Northern log rates are higher than those of the other lines (Trans. fol. 193, pp. 86-92). Notwithstanding these conditions and the testimony of the Department's expert at the hearing, that the Northern Pacific could stand a greater reduction than the other roads (Trans. p. 754), the Department's order imposed a greater rate reduction and loss of revenue upon the Great Northern

in proportion to the business handled by it, than on any of the other lines. The Great Northern, handling approximately 21,000 carloads of logs per year (Trans. p. 86), will suffer an annual loss of revenue under the reduced rates of $120,000, as nearly as can be estimated (Trans. p. 49). Its gross revenue from the log traffic is $318,490 per annum (Trans. p. 89) (using 1920 figures), over 37 per cent of which will be cut away by the order if it becomes effective. The Northern Pacific, handling about 102,000 cars per year, will lose revenue of about $200,000 per annum under the Department's order (Trans. 86, 49). The reduction is thus about $6 per car to the Great Northern and $2 per car to the Northern Pacific. The Great Northern, with an admittedly higher operating cost than the Northern Pacific, has thus been given a rate reduction about three times as great per car as the latter line. It will be pointed out later that this anomalous result arises from the method pursued by the Department in measuring the cost of the log traffic, not by the expense incurred by the several lines in handling it, but "upon the basis of the cost per 1,000 gross ton miles of handling all freight upon the combined systems of the four principal carriers."

Great Northern cost data are not based upon any system of averages, but are the result of a direct study of the cost of handling logs (Great Northern Exhibit 23, Trans. pp. 295-304). To ascertain the cost of the log traffic upon its line in Washington the Great Northern selected for intensive study a typical operation. The movement selected for study was from Gold Bar to Everett. It was chosen as a typical movement and one eminently fair to the loggers, for the following reasons: First, it is the largest movement on the Great Northern in the state (Great Northern Exhibit 1, Fol. 369); Second, the length of the haul, 31.3 miles, is approximately the same as the average length of haul of all logs on the Great Northern lines in the state (Associated Log Shippers' Revised Exhibit 2, p. 86); Third, the movement is over the main line, with the resulting low cost that goes with the main line movement; Fourth, the analysis of road hauling cost was conducted for solid train loads of logs, which resulted in a lower cost being ascertained for the train movement than if mixed trains subject to switching had been selected for study; and fifth, the Public Service Commission of Washington had previously found that the movement between Gold Bar and Everett

is handled by the carrier at less expense than is ordinarily incurred in the transportation of the logs of other shippers (Trans. p. 778, 779). This finding was made in *Wallace Falls Timber Co. v. Great Northern Ry. Co.*, First Annual Report of the Department of Public Works, pp. 14-18, reviewed in *Public Service Commission v. State ex rel. Great Northern Ry. Co.*, 118 Wash. 629, 204 Pac. 791, 207 Pac. 688, and reads as follows:

"That by reason of the manner in which the complainant so conducts its logging business as to loading, unloading, making up trains without the requirement of switching service and as regards the equipping and maintaining of the said cars with steel bunks as aforesaid, thus enabling the said respondent to maintain what is known as the shuttle movement of its cars used in said business, keeping them constantly in daily service under load and saving the respondent the major portion of damages to cars usually incident to such service, enables the said respondent to transport said logs at less cost and expense to it than is ordinarily incurred by said railway company in the transportation of the logs of companies which do not conduct their business in the manner aforesaid and which do not furnish and maintain the equipment hereinbefore referred to."

The cost of service was divided into three main items, operating expenses, taxes and capital charges. Operating expenses were further broken

up into road haul, yard handling and other items of cost (Trans, p. 296). Hours of service of train and engine crews were obtained from the time slips of the men actually engaged in handling the solid log trains being studied (Trans. p. 296). Fuel consumed was determined from the individual fuel tickets prepared by the men at the time of taking fuel on these particular trips (Tr. p. 782). Engine service expenses, comprising locomotive repairs, lubricants and supplies and enginehouse expenses were those for the particular class of engine handling the log trains in that district (Trans. 782). Car repairs were determined from an actual study of the cost of repairs to these particular cars in the log service (Trans. pp. 297, 298, 783). Cost of yard switching at the log dump was based upon actual observation of time required to handle log cars (Tr. pp. 299, 783-785). In each and all of these computations the hours of service for labor or units of material used were applied to the reduced rates of wages and material costs effective subsequent to July 1st, 1921, when substantial reductions in wages became effective (Trans. p. 782). Maintenance of way expenses, after reducing to lower wage levels effective after July 1st, 1921, were assigned to the log movement on the basis of

relation of fuel consumed by log trains compared with total fuel consumption; this being the basis prescribed by the Interstate Commerce Commission for separating maintenance of way expense between freight and passenger service, on the theory that the fuel consumed bears a direct relation to the amount of steam produced, and the steam produced is in turn related to the tonnage and speed of train handled (Tr. p. 299, 300, 785, 786). These direct expenses described above amount to about eighty per cent of the entire operating expenses, and the miscellaneous expenses were added on the basis of their ratio in the State of Washington (Tr. p. 302). We print below an excerpt from Sheet 7 of Great Northern Exhibit 23 (Trans. p. 302), summarizing the above cost analysis:

Total operating expenses per car for handling solid trainloads of logs between Gold Bar and Everett, Wash., 31.3 miles, based on reduced wages and cost of material effective after July 1, 1921.

Maintenance of way expenses per car	$ 4.06
Road Haul, direct expense per car	9.32
Yard handling, direct expense per car	2.36
	$15.74
Add for Miscellaneous Expense 25.8457%	4.07
Total Operating Expense	$19.81

This operating cost of $19.81 per car—which includes no taxes or capital charges—may be compared at this point with the revenue that will be derived by the Great Northern for the movement from Gold Bar to Everett under the scale of rates ordered by the Department of Public Works. The rate prescribed is $1.75 per thousand feet for distances over thirty, and not over thirty-five miles (Trans. p. 30). The minimum load for single car shipments is 7,000 feet of logs, board measure, per each car equipped with steel bunks, and 6.500 feet per each car not so equipped (Trans. p. 31). Applying the $1.75 rate to the 7,000-feet minimum load will give a revenue of $12.25 per car, which is the most the Great Northern can hope to be paid for a transportation service involving an out-of-pocket expense of $19.81 per car, without including one cent for taxes or capital charges. No more than this can be earned, for Associated Log Shippers' Revised Exhibit 2 (Trans. p. 86) shows that the average load of logs on the Great Northern is 6,535 board feet, or nearly 500 feet less than the prescribed minimum.

Exhibit 23 then proceeds to assign taxes to the log service on the basis of log revenue, using the same ratio as all taxes bear to all revenue. This

is the method used in *North Dakota v. Northern Pacific R. Co.*, 26 N. Dak. 438, 145 N. W. 135, approved on accounting features in *Northern Pacific R. Co. v. North Dakota*, 236 U. S. 585, 59 L. Ed. 735. This basis is used by accountants generally (Trans. pp. 788, 789).

Capital charges for equipment were assigned to log service on the basis of six per cent of original cost of locomotives, cars and cabooses used in the log service (Trans. p. 304). Capital charges for fixed property were assigned to log service on the basis of six per cent of the value used by the State Equalization Committee for that part of the line used in the particular log movement under study. This value was based on a valuation by the Railroad Commission in 1908, plus additions and betterments to 1916.* Assignment to log service was on the basis of the number of trains passing over this section of track (Trans. pp. 303, 304, 789, 790).

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*The total state valuation from which the capital assignment for fixed property was developed is only $70,480,255. (Great Northern Exhibit 25, Trans. pp. 308 et seq.) The valuation of the Great Northern lines in Washington in 1920 was $82,902,085 shown in Great Northern Exhibit 17. (Trans. p. 290.) This exhibit is based upon a valuation made by the Railroad Commission in 1908, plus net additions and betterments to 1920.

The Equalization Committee's valuation is identical with the Railroad Commission's valuation as supplemented, except that it does not include additions and betterments since 1916. The valuation determined by the Railroad Commission plus net additions and betterments

The total expense of this log movement—which has hitherto been found by the Department of Public Works to be the least costly on the Great Northern lines in the State of Washington—is therefore found to be:

Road Haul, direct expense per car	$ 9.32
Yard Handling, direct expense per car	2.36
Maintenance of Way expense, per car	4.06
Miscellaneous expense, per car	4.07
Total Operating Expense (out of pocket)	$19.81
Taxes per car	1.69
Capital charges, per car	3.73
Total Operating Expense, taxes and capital charges	$25.23
Maximum Revenue per car at rate prescribed by Department	12.25
Deficit per car from Department's Order	$12.98

was, under former laws, binding upon the State Equalization Committee for taxation purposes. (Trans. 755.) See State ex rel. O. R. & N. Co. v. Clausen, 63 Wash. 535, 116 Pac. 7. The original valuation made by the Railroad Commission in 1908 with additions and betterments to 1916 was certified by the Railroad Commission to the Equalization Committee but the figures have not been furnished since on account of the repeal of the law which made the Railroad Commission's findings obligatory upon the Board of Equalization. (Trans. pp. 754, 755.) The valuation of the Equalization Committee was, however, more convenient for use in the present connection, because it divides the total valuation between real and personal property and reduces both of these divisions to a value per mile of main track and sidings in the several counties. It was therefore used, though lower than the true figure.

In short, the revenue to the Great Northern on two cars of logs at the rates ordered by the Department will not pay it for the expense of hauling one. It is perfectly obvious that there is no error in Great Northern Exhibit 23 which will compensate for such a discrepancy. Applying the results found by the study of the Gold Bar to Everett movement —declared by the Department of Public Works to be the least costly in the state—to the entire transportation of logs on the Great Northern lines in Washington, the following result is obtained:

Revenue from logs, January - August, 1920	$221,174
Add 25% for increase in rates, effective August 26, 1920	55,294
Revenue from logs, September to December, 1920	97,316
Switching and demurrage revenue (logs)	473
Total revenue at increased rates	$374,257
Operating expenses	425,578
Net deficit from railway operations	$ 51,321
Taxes	36,322
Railway operating deficit	$ 87,643
Capital charges applicable	80,218
Net loss from handling logs	$167,861

(Great Northern Exhibit 23, sheet 1, Trans, p. 296).

The assignment of capital charges in any way that may be suggested does not substantially alter this result and it is therefore unnecessary to go into any discussion of the proper basis of assigning capital charges to the log business, since, disregarding capital charges entirely, it is manifest that the rates ordered by the Department will fall far short of paying operating expenses, to say nothing of taxes.

O.-W. R. & N. COMPANY
COST OF LOG TRANSPORTATION

Substantially all of the Oregon-Washington Railroad & Navigation Company's log traffic in the State of Washington is confined to its Grays Harbor branch extending from Centralia to Aberdeen, and the North River branch, extending from a connection with the Grays Harbor branch at North River Junction to Primo. (Trans. 438, 440, 446.)

During the year 1920, the Oregon-Washington Railroad & Navigation Company moved, within the State of Washington, 15,892 cars of logs as compared with 21,483 on the Great Northern; 84,848 on the C., M. & St. P., and 101,725 on the Northern Pacific. (Associated Log Shippers' Exhibit No. 2,

Trans. 77.) Of the four carriers involved it will be observed the Oregon-Washington Railroad & Navigation Company has the smallest tonnage. The record shows the Northern Pacific has the heaviest log tonnage and is the strongest carrier in the State. The rate expert for the Department of Public Works stated the Northern Pacific would earn a reasonable return on a lower scale of rates than the Great Northern; Chicago, Milwaukee & St. Paul, or Oregon-Washington Railroad & Navigation Company (Trans. 754).

The average log haul per loaded car on the Oregon-Washington Railroad & Navigation Company is 15.2 miles, or approximately one-half of the average haul of the other three carriers (Trans. 827, Associated Log Shippers' Revised Exhibit 2, Trans. 86), and, as pointed out, the cost of handling log traffic is greater than the average cost of freight traffic as a whole.

By reason of these facts and to prevent unnecessary duplication of general statistical information, the Oregon-Washington Railroad & Navigation Company adopted, in so far as applicable, the testimony and exhibits of the other carriers (Trans. 816 and additional Trans. 42) and endeavored to confine its testimony and exhibits to data, parti-

cularly applicable to the Oregon-Washington Railroad & Navigation Company.

Oregon-Washington Railroad & Navigation Company's Exhibit No. 8 (Trans. 315), shows that for the year 1920 the valuation of the Grays Harbor branch and the North River line assigned to log traffic amounted to $633,544.00, covering road, and $515,200.00 covering equipment, or a total of $1,148,744.00; that interest at six per cent on the valuation of the property assigned to log traffic amounts to $68,925.00 per annum. The taxes for the year 1920, assigned to log traffic, are $6,981.00, covering road, and $1,317.00, covering equipment, or a total of $8,298.00, which makes a total covering interest and taxes of $77,223.00.

The witness Gray offered Associated Log Shippers' Exhibit No. 4 (Trans. 88), which shows the operating expenses for the Oregon-Washington Railroad & Navigation Company for the year 1920 assigned to log traffic as $97,447.00, but, as will be explained, this does not include anything for cost of non-revenue freight. Raising this cost by 12.50 per cent (Trans. folios 510-12, items 84-86), following the Department's method in Finding No. 13, to allow for cost of transporting non-revenue freight, amounts to $12,181.00, or a total of $109,-

628.00, as the cost of log transportation under Mr. Gray's theory after making this additional and admittedly necessary correction. Adding $77,223.00 for taxes and interest charges as above shown, gives a total of $186,851.00 chargeable to log traffic for taxes, interest and operating expenses.

The operating revenues of the Oregon-Washington Railroad & Navigation Company on Washington log traffic for the year 1920 are shown to be $199,450.00 (Trans. 88).

The Oregon-Washington Railroad & Navigation Company introduced testimony showing that the North River line served a timbered country and the timber would be exhausted in fifteen years; that there was no other traffic which would justify the operation of a railroad after the timber was removed. (Trans. 817-823.) Based on the contemplated use of the line for fifteen years, the Oregon-Washington Railroad & Navigation Company introduced in evidence its Exhibit No. 9 (Trans. 316), which shows that the Oregon-Washington Railroad & Navigation Company would be required to earn an additional sum of $60,836.00 annually to cover the amortization of the North River line. This feature and condition is peculiar to this logging line of the Oregon-Washington Railroad &

Navigation Company alone involved, and the other three carriers offered no proof of any exclusively logging line operation by them. Adding this amortization charge to the previous mentioned operating expenses makes a total of $247,687.00, which leaves a total deficit from the operation of logging traffic in the State of Washington of $48,237.00 per annum.

Shortly stated, the account is made up as follows:

(1) Valuation, Grays Harbor and North River line, for 1920, assigned to log traffic:		
(a) Road	$ 633,544.00	
(b) Equipment	515,200.00	
	$1,148,744.00	
(c) Interest at 6% on valuation		$ 68,925.00
(2) Taxes assigned to log traffic in Washington:		
(a) Road	$6,981.00	
(b) Equipment	1,317.00	8,298.00
(3) Operating expenses assigned to logging traffic		109,628.00
(4) Amortization expenses		60,836.00
Total		$247,687.00
(5) Operating revenues, log traffic, for year 1920		$199,450.00
Annual deficit		$ 48,237.00

The Department disregarded the uncontradicted evidence introduced by the Oregon-Washington Railroad & Navigation Company with reference to the amortization of the North River line. Under the law the carrier may by amortization provide means for replacing the parts of the plant when these can no longer be used. This principle was applied to a logging railroad in the case of *Hammond Lumber Company v. P. S. C. of Oregon*, 96 Oregon, 506, 605, 189 Pac. 639, and applied in a water works case, in *City v. Knoxville Water Co.*, 212 U. S. 1, 13, and applied in two gas cases, in *Bonbright v. Geary*, 210 Fed. 44, 52, and *Petersburg Gas Co. v. City of Petersburg*, 110 S. E. 533; 20 A. L. R. 542, 554.

This fact alone demonstrates that the Department's method of taking the combined value and operating expenses of the four carriers for the purpose of arriving at a compensatory rate cannot be correct as applied to the Oregon-Washington Railroad & Navigation Company, since none of the carriers other than the Oregon-Washington Railroad & Navigation Company are claiming anything on account of amortization. The testimony is unchallenged that it will be necessary for the Oregon-Washington Railroad & Navigation Company to

earn an additional sum of $60,836.00 per annum in order to amortize its North River line,—the Findings and Order show on their face that the Department gave no consideration to this testimony but constructed a consolidated rate base and joint tariff, which entirely disregards the difference in character of the Oregon-Washington Railroad & Navigation Company's North River logging line and the necessity to apply for that Company the amortization feature.

Department's Computation of Cost

The carriers' proofs of the cost of log traffic were disregarded by the Department. Instead, it *invented* an amazing method for determining the cost of log transportation by means of which it pretended to compute a fair return. Its method is best shown in its own language as follows:

Finding XIII.

"In arriving at the net revenue from log traffic earned by the four principal carriers within the state during 1920 of $818,448, the following method was used:

Gross revenue from log transportation	$2,859,172
Incidental freight revenue assigned to log transportation	56,232
Total revenue	$2,915,404

Operating expense assigned to log transportation	$1,923,198	
Taxes assigned to log transportation	173,758	
Total expense		$2,096,956
Total net		$ 818,448

"In arriving at the operating expense assigned to the log traffic, the cost of freight operation within the State of Washington was calculated upon the basis of the cost per 1,000 gross ton miles of handling all freight upon the combined systems of the four principal carriers, and in this manner the total cost of freight operation assignable to the State of Washington was found to be $38,678,870, which is equivalent to a unit operating cost of $5.321 per 1,000 revenue gross ton miles handled by the four principal carriers within the state during the year in question. On this basis the cost of handling the log traffic within the state during the year by such carriers was $1,923,198. The taxes assigned to the log traffic are one-half of those contended for by the carriers after the elimination of income taxes. All of the figures used in this calculation are contained in the annual reports filed with us by the carriers, or were taken from the exhibits supplied by the carriers in this case."

The operating expense of the four carriers assigned to logs is fixed at $1,923,198. To get this

expense the Department used the "cost per 1,000 gross ton miles of handling all revenue freight upon the combined systems of the four principal carriers." Referring to Associated Log Shippers' Revised Exhibit 4, line 5 in the last column under the heading "grand total" (Trans. 88), the total gross ton miles of the four systems is shown to be 8,589,577,958. Associated Log Shippers' Exhibit 3-A (witness Gray, Trans. p. 89), gives the weighted average 1920 system operating costs for the four carriers per 1,000 g. t. m. of *all* freight at $4.48. But since about 20% of *all* freight is *non-revenue* producing, that is, company material, coal, ties, rails, etc., it was necessary for the Department to raise the $4.48 by the ratio that non-revenue freight bears to the total in order to get the cost of *revenue freight* only. For this purpose 18.772% was taken as the average of the four systems. (For the Northern Pacific it was 20% in 1920. Peterson, Trans. 540). Raising $4.48 by 18.772% gives $5.321 per 1,000 g. t. m.

The Department then referred again to Exhibit 4, line 10, and found the gross ton miles of log traffic on the four railroads to be 361,435,434, multiplied by $5.321 average cost per 1,000 g. t. m. of all *revenue* freight on the four systems, equals

$1,923,198, which is the figure found by the Department as the aggregate cost of handling log traffic by the four companies in 1920.

It is admitted, and the Department found (Finding VI) that log transportation is in very large part confined to the area in Washington west of the Cascade range, a mere fringe; but it is assumed (contrary to the undisputed evidence) that cost of log transportation on the four roads is exactly the same as the weighted average cost of all revenue freight transported on the combined transcontinental systems of the four companies. If this method be correct, then railroad accounting is as simple as the multiplication table, for one need only find total gross ton miles handled, total expense, and divide the two to get average cost. Then multiply the ton miles of any particular traffic, no matter where it moves or what its traffic peculiarities, by the average cost, and the result is the cost of the traffic under investigation. And by the same token, the method may be extended to the entire United States with equal reason, and obtain the cost of moving any commodity on any railroad or operating division thereof. If the cost of log transportation be correctly stated at $5.321 per 1000 g. t. m. so likewise is that the cost of moving apples

from Yakima to Minneapolis, grain from Washington and Dakota to the head of the lakes, and so with all of the traffic from all points of origin to all destinations.

So far as the Great Northern is concerned, it happens to be stated in the record that iron ore, the commodity which moves in greatest volume on the Great Northern System, is not at all comparable to logs, as regards the expense of transportation. In the year 1920 the total tonnage of all freight handled by that company was 32,948,293 tons. Slightly less than half of this, or 14,755,241 tons, was iron ore handled in the State of Minnesota. That ore originates at one place and terminates at one place, and *the average train load of ore will run from six to eight times as much as the average train load of logs.* The undisputed evidence is that the average cost of moving a loaded car mile of ore would not be as great as the average cost of moving a loaded car mile of logs (Trans. p. 808). It is obviously inadmissible to compare the movement of 300,000 tons of logs from different originating points to different destinations in Washington with the movement of 15,000,000 tons of ore originating at one place and terminating at one place in Minnesota, and moving

in train loads six or eight times as large as the average train load of logs. Yet the computation of the Department includes not only that one misleading element, but thousands of others as diverse as the commerce of the Northwest.

That the actual cost of the log traffic, because of shortness of haul, branch line movement to which it is mostly confined, excessive damage to equipment, extremely low mileage per car and engine day in service, empty car movement, and other peculiarities, is far in excess of the average system costs of all traffic, has been shown. The enormity of the Department's error is self-evident. Having fixed the cost of the log traffic by assuming it to be the average of the four system costs, the Department, in another of its findings, uses the following language:

"There is no commodity movement in the United States which is similar or analogous to the movement of logs in the Pacific Northwest. . . . . Due to the peculiar conditions which surround the log traffic within this state, comparison of log transportation rates in other states and decisions of tribunals involving log rates in such states are of little use to us in this case. Neither is the log traffic fairly comparable with that of any other commodity transported within the State of Washington." (Finding XVII, Trans. 26.)

By its finding of dissimilarity of transportation conditions the Department itself points out the error of the method by which it determined cost of log transportation in Western Washington. A similar contradiction of findings caused a reversal by the State Supreme Court of another order of the Department establishing a log rate in a case decided a few months prior to this one. *P. S. Commission v. State ex rel. Great Nor. Ry. Co.*, 118 Wash. 629, 204 Pac. 791, 207 Pac. 688. The error into which the Department fell is all the more surprising since Mr. Calderhead, its traffic expert and statistician, had requested and been supplied with the necessary data concerning log transportation in Western Washington by the use of which an approximate determination of the cost of log traffic could have been made. (Trans. 322.)

Another egregious inconsistency appears in the findings. In Finding XX (Trans. p. 27), the Department said:

"The volume of traffic moving is a controlling element. The fixed charges of a railroad remain fairly constant and operating expenses do not increase proportionately with increased traffic volume."

Yet the Department attempted to measure the cost of the log traffic in Western Washington by an average operating cost made in territory of much greater traffic density. The record shows that the volume of traffic is lower on each line in the State of Washington than on the system. The figures are:

Great Northern—

Ton Miles revenue freight per mile of road:

System ----------1,042,152
State ---------- 677,463

(Trans. fol. 452-456. Item 125)

Northern Pacific—

Ton Miles revenue freight per mile of road:

System ----------1,180,283
State ---------- 845,830

(Trans. fols. 287-289. Item 125; fols. 279-286. Item 125).

Chicago, Milwaukee & St. Paul—

Ton Miles revenue freight per mile of road:

System ----------1,071,629
State ---------- 682,249

(Trans. fol. 364. Item 125; fols. 365-368. Item 125).

Oregon-Washington Railroad & Navigation—

Ton Miles revenue freight per mile of road:

System ---------- 824,132
State ---------- 434,878

(Trans. fol. 509. Item 125; fols, 510-512, Item 125).

The fact is fundamental that traffic can be handled more cheaply over a railroad in large quantities than in small quantities. *Smyth v. Ames*, 169 U. S. 466, 42 L. Ed. 819; *Michigan Percentage Cases*, 47 I. C. C. 409, 445-449. It was therefore contrary to the evidence and its own findings for the Department to use the general average cost of hauling freight in heavy volume on some 28,000 miles of railroads in twelve states as the measure of the cost of hauling logs in Western Washnigton, where the density of traffic is much less.

The extent to which the Great Northern—with its high operating cost in Washington—suffered by having the expense of its log traffic in that state measured by the much lower average cost of the four systems, is rather startling. Its operating cost in Washington is $6.97 per 1,000 gross ton miles, as compared with an average for the four entire systems of $4.48. (Trans. p. 89.) The difference is substantially 36%. The cost of the Great Northern log traffic was therefore computed by the Department of Public Works upon a basis 36% lower than the minimum true cost.

Using the precise method of computation followed by the Department of Public Works to de-

termine the cost of the log traffic, but substituting the actual unit freight operating cost of the Great Northern Railway in the State of Washington in place of the average freight operating cost of the four systems, the result of the log traffic upon Great Northern lines in Washington is found to be as follows:

		Trans. Reference
(1) Net ton miles—revenue freight	819,418,933	f. 452
(2) Net ton miles — non-revenue freight	110,655,379	f. 452
(3) Net ton miles—all freight	930,074,312	f. 452,196a
(4) Ratio of revenue freight ton miles to total ton miles— (819,418,933 ÷ 930,074,312)	88.10%	
(5) Gross ton miles—all freight	1,896,743,278	f. 196a
(6) Gross ton miles — revenue freight 1,896,743,278x.8810)	1,671,030,828	
(7) Cost of all Great Northern freight operations in Washington	$13,220,797	f. 196a
(8) Cost per 1,000 gross ton miles revenue freight ($13,220,797) / (1,671,030,828)	$7.912	
(9) Gross ton miles—log traffic	37,975,889	f. 196a
(10) Cost of operation—log traffic (8x9)	$300,465	
(11) Revenue from logs—gross	$318,490	f. 196a

(12) Incidental freight revenue assigned to log transportation 1.97% of gross revenue from logs	*$6,274
(13) Total revenue assignable to logs	$324,764
(14) Revenue from logs—net	$24,299
(15) Taxes assigned to log transportation	†$16,017
(16) Total net before capital charges	$8,282

Thus, following the Department's method in every respect, but using actual Great Northern cost figures, instead of averages drawn from three other lines, it is found that the Great Northern is earning under present rates only $8,282 per annum from its log traffic (this is seven-tenths of one per cent on investment in property), which may be compared with the minimum of $67,000 per annum it is

*The basis on which the Department assigned incidental freight revenue to the log transportation is not stated in the findings, but it amounts to 1.97% of the gross revenue from log transportation (Finding No. 13) and the same percentage has therefore been used in the above calculation.

†The carriers contended for the assignment of both Federal and state taxes to the log traffic upon a gross revenue basis. (Great Northern Exhibit 24, fol. 397.) The Department assigned to the log traffic only one-half the taxes contended for by the carriers after the elimination of income taxes. As the carriers did not show their income taxes separately from their other Federal taxes (Great Northern Exhibit 24, fol. 397), it is impossible in Item 15 to give a figure exactly comparable to that used by the Department. To be certain, however, of erring only on the safe side, the figure of $16,017 eliminates all United States taxes—both income taxes and others—and comprises only fifty per cent of the Washington state taxes assignable to the log traffic upon a revenue basis.

entitled to earn (Infra. p. 95) as a fair return on the property devoted to the business.

If state and federal taxes were assigned upon a straight revenue basis, 12.86% (Great Northern Exhibit 24, Trans. p. 305) the tax item in the above total would be increased from $16,017 to $41,765, and instead of a slight earning of about $8,000 there would be a deficit of $17,384, before capital charges.

The department's order reducing rates has been suspended and the former rates continued in effect pending this litigation by virtue of supersedeas bonds given by the carriers. In the order of supersedeas the Court found that the annual loss of revenue to the Great Northern under the reduced rate schedule under review would be approximately $120,000 per annum (Trans. 49). Add this $120,000 to a loss of at least $17,000 that the Great Northern is already sustaining in its log traffic—which yields it gross revenue of only $318,000 per annum (Trans. opp. p. 88)—and it will be seen why the Company is constrained to resort to this Court for protection. *The loss will be over forty-three per cent of the present gross revenue if we make no other correction in the Department's method except a slight change in the tax assignment.*

The fundamental error of the Department's method was aggravated by minor, though material, errors in the assignment of taxes to log traffic; in prescribing a new method for computing minimum loads, and in prescribing a penalizing lower rate and minimum for cars not equipped with a patent loading and staking device. These features may be considered in this connection.

The apportionment of taxes to the log traffic was inadequate and erroneous. (Assignment VI.)

The Department's Finding XII states that because logs are for the most part handled on inexpensive branch lines and make little or no use of costly terminals, and the rolling stock is comparatively inexpensive, but 50% of the taxes apportioned to logs by the carriers on the basis of gross receipts will be allowed, and in Finding XIII it is said that taxes have been apportioned by the Department on that basis. Federal income taxes are disallowed altogether.

So far as the Northern Pacific is concerned, 24.87% of log car miles are on the main line. (Peterson, Trans. 528.) For 1920 taxes paid in this state are 11% of gross receipts from state and interstate traffic (Trans. 733). On the basis of

11% of gross receipts from log traffic $148,658 should be allocated as taxes on the property devoted to that traffic (Peterson, Trans. 733, Ex. 47.) $18,961 is allocated to log traffic as its proportion of income taxes. (*Id.*) On the four lines 12.86% of gross earnings in the state go to pay state and federal taxes (Trans. p. 305). Half the state taxes claimed on this basis and no income taxes were allowed by the Department, as stated.

In *Northern Pacific R. Co. v. North Dakota*, 236 U. S. 585, and *N. & W. R. Co. v. Conley*, 236 U. S. 605, taxes were allocated to the lignite and passenger traffic within the state on a revenue basis without question. That our basis is, if anything, too favorable to log traffic is made certain by our traffic exhibits from which it appears that revenue from log traffic, because of the extremely low log rates, is only from a fourth to a half of the revenue derived from the half dozen lowest rated commodities carried. See post page 136.

These commodities are the ones with which the Interstate Commerce Commission compares logs, fixing rates on a parity with them. *Roanoke v. N. S. R. Co.*, 41 I. C. C. 431; *Chattanooga Log Rate Case*, 35 I. C. C. 163. Therefore, if logs were now earning a proper rate, taxes assignable would be

substantially doubled. So far as income taxes are concerned, that item was properly chargeable. *Galveston Electric Railway Co. v. Galveston*, 258 U. S. 388. In the matter of assigning taxes the Department did not confound the log traffic with all other traffic, as it did in finding operating costs and property values. Had the Department, in assigning taxes, adhered to its method of apportioning operating costs and property value it would have been compelled to assign twice as much for taxes as it did assign. The Supreme Court made no mention of the matter of ad valorem taxes assigned to log traffic. It admitted the error in disallowing income taxes but thought it was harmless. The point was argued in that court at page 47 of the brief of the Northern Pacific Company. A copy of the brief is in the record.

The order prescribing that minimum loads shall be computed by averaging the weight of all cars of logs tendered at one time is erroneous.

Findings XXIV and XXV relating to this subject are as follows:

"XXIV. The present method of specifying the minimum load per car is inequitable and results in the assessment of excess freight charges against the shipper who upon an average loads more than the minimum per car. A more equitable method

would be to designate an average carload minimum based on the number of cars tendered the carrier in any one shipment, and the Department will so order."

"XXV. The promulgation of the rules designating an average carload minimum based upon the number of cars tendered the carrier in any one shipment will reduce the revenues of the carriers by an amount equal to the excess charges amounting to about six per cent of the total charges or approximately $150,000 per year, under the scale of rates herein prescribed. We have taken this into consideration and have fixed the basic rate sufficiently high to earn that additional revenue, that is to say, we have prescribed a rate that will produce six per cent more revenue than we would have prescribed had we not changed the rule as to minimum load."

The order on the subject is as follows:

"It is further ordered that the carriers provide in their tariffs a minimum load of 7000 feet for each car equipped with steel log bunks and 6500 feet for each car not so equipped, to be applied in all cases of single car shipments, but where more than one car is tendered or forwarded in any one shipment, that the minimum load of 7000 feet be averaged for the entire number of cars equipped with steel log bunks in any one shipment, and a minimum of 6500 feet shall be averaged for the entire number of cars not so equipped in any one shipment."

The order prescribing a lower minimum and lower rate for cars not equipped with patent bunks is erroneous.

Finding XXIII is as follows:

"In view of the fact that log flats, equipped with steel log bunks constitute safe, adequate and sufficient equipment for the prompt, safe and expeditious transportation of logs, we strongly recommend that the carriers, parties hereto, equip a reasonable number of log flats with steel bunks, the number so equipped bearing a proper relation to the volume of log traffic on the respective systems. The testimony shows that cars so equipped will permit of heavier loading and hence yield a greater revenue to the carriers. The minimum load for cars not equipped with steel bunks should be 500 feet less than the minimum prescribed for cars so equipped and we will so order. The Department will direct that a rule be carried in the tariffs of the carriers whereby a lower charge will be made on cars not equipped with steel log bunks."

The order provides:

"Where cars not equipped with steel log bunks are furnished shippers, the charge applicable to each carload will be upon the basis of rates named in the tariff, less a deduction of fifty cents per car."

The 6500 feet minimum is contained in the feature of the order quoted above.

It is realized that these points do not make, standing alone, a question of confiscation. But they are important as they affect the net return permitted to the carriers by the prescribed schedule.

The new method for computing minimum loads will cost the four companies $150,000 per annum, according to Finding XXV. The Department pretends to have considered this and prescribed a schedule to earn that much more revenue than it otherwise would have prescribed. There is no data by means of which the loss may be divided among the four companies. As far as the record is concerned, the Department reached up into the air for this finding. To apply a more favorable minimum to large shippers than to small necessarily occasions the very discrimination the State law, Rem. Code, Sec. 10357, was intended to prevent. The witness, W. C. Albee, showed how discrimination would occur. (Trans. 562.) It has always been held that wholesale rates (and of course wholesale minima are in the same category), are unlawful. *L. S. & M. S. R. Co. v. Smith*, 173 U. S. 684, condemning wholesale rates for passengers purchasing mileage books at less than regular rates charged the casual traveler. In *P. S. Commission v. State ex rel. Great Nor. Ry. Co.*, 118 Wash.

629, 204 Pac. 791, 207 Pac. 688, the State Supreme Court held shippers of train loads of logs could not lawfully be accorded a less rate than shippers of single carloads, reversing the commission's order for that reason and citing many cases. This point was ignored by the State Supreme Court, although strenuously argued in the carriers' briefs.

Patent Bunks

The patent bunk feature, Finding XXIII, relieves the log shippers of the necessity of securing the loads on the cars and obviates the use of stakes at a cost to log shippers of $2 or $3 per car. (Trans. 873.) There is a recommendation in Finding XXIII that the carriers equip "a reasonable number of log flats with steel bunks." The Northern Pacific has heretofore equipped 75 per cent of its log cars with this device. (Albee, Trans. 562.) As found in the dissenting opinion, cars so equipped cannot be used in any other traffic. (Albee, Trans. 562.) The arbitrary nature of the order in so penalizing the carriers for the benefit of the shippers is pointed out by Superintendent Albee. (Trans. 562.) The Department did not require affirmatively that this be done, presumably recognizing a limitation on its powers in view of *U. S.*

v. Pennsylvania R. Co., 242 U. S. 208, holding that a carrier cannot be required to furnish special equipment which it does not own. *James v. Director General*, 280 Fed. 780, that special poultry cars cannot be required. And particularly decisions of the Interstate Commerce Commission, viz., *Shands v. S. A. L. R. Co.*, 34 I. C. C. 214, holding a Florida statute requiring log cars to be equipped with stakes void as applied to interstate commerce. In *National Lumber Dealers Assn. v. A. C. L. R. Co.*, 14 I. C. C. 154, the Commission says:

"Staking the load is in reality a part of the operation of loading, and in the case of lumber it appears that, as a practical matter at least, one side of the car must be staked before the load can be placed. * * * The lumber business has been conducted for many years with reference to the custom of loading and staking carload shipments by shippers and is now firmly established on that basis."

In *S. W. Millers v. St. L. & S. F. R. Co.*, 26 I. C. C. 245, the Commission says:

"Generally when it is necessary to secure upon the car freight which the shipper loads it is the duty of the shipper to supply the necessary material and do the work."

The department's order penalizes the carrier for not doing work incumbent upon the shipper, or providing a device at great expense which will

relieve the shippers of this obligation. How much this feature of the order will cost the carrier there is no way of knowing. In view of the limitations on the right of review (*State v. Fairchild*, 224 U. S. 510), there was no opportunity after the order to make the showing. We may assume the loss to be considerable in view of the importance the log shippers attached to this feature.

Associated Log Shippers' Cost

We have shown the method adopted by the carriers for computing cost of log transportation. We have also discussed the method adopted by the Department of Public Works. For the conclusions stated in the Department's findings there was an utter lack of evidence. Neither did this method have an advocate. It was an invention of the Department's "experts," as is said in Finding XX. The only other evidence produced before the Department as an alternative to the carriers' method of computing cost of log transportation is the testimony and exhibits of Henry L. Gray, a witness for the "Associated Log Shippers," which is now to be considered.

The cost of log traffic as shown by the carriers' witnesses was not disputed. If it be proper in a

case of this kind to compute the cost of a particular kind of traffic on a particular division of road by assigning to such traffic the average cost of all traffic on the division, coupled with proof that the particular traffic costs as much or more than all other traffic on those divisions, as was done by the N. P. and O.-W. R. & N. Companies; or by direct analysis of a typical movement, as was done by the Great Northern Company, then, and in that case, the log traffic incurred a large operating deficit. The Associated Loggers produced Henry L. Gray, an engineer, who explained a series of exhibits marked "Associated Log Shippers Exhibits." (Trans. 620.) Mr. Gray used the statistics requested by Mr. Calderhead and shown on Northern Pacific's exhibits 15, 16 and 17, together with certain other figures found in the annual reports. He undertook to draw from these figures the conclusion that log traffic is not unprofitable. This is the theory by which his conclusion was reached: (The same method being common to all lines, only Northern Pacific figures will be stated here.)

He first finds the "cost of freight operation" in Washington for the Northern Pacific to be $21,283,037. Then he finds the "total gross ton miles" in the state produced at the cost mentioned, or an

average cost per 1,000 gross ton miles of $5.508. Then he finds gross ton miles of log traffic to be 191,683,564. He multiplies the log gross ton miles by the average cost of $5.508 of all freight in the state and calls that "cost of operation, log traffic," of $1,053,297 for the Northern Pacific. He then takes the total Northern Pacific revenue from log traffic at $1,308,875 from which he deducts the so-called cost, and terms the result "revenue from logs, net $253,578." (Assoc. Log Shippers Revised Exhibits, Trans. 86, 87, 88.)

He thus assumes the same cost for log traffic as for all other state traffic, *making no allowance for cost of non-revenue freight.* Of course, if such a method be correct, then the cost of any other kind of traffic in the state on any part of the railroad may be determined with mathematical accuracy. *Gray allowed nothing for cost of non-revenue freight chargeable to logs, nor does he include anything for taxes.* (Trans. 645.) If these two items be considered, it is easy to show that even according to Gray's theory log traffic incurred a loss in the year 1920. This demonstration was made by the carriers in Great Northern Ex. 24. (Trans. 305-306.)

On exhibit 4, line 11 (Trans. p. 89), the cost of log traffic on the Northern Pacific is shown to be $1,055,297, and, adding taxes at 11 per cent of gross receipts, as the witness Peterson did, amounting to $166,619 (including income tax), gives total cost of $1,221,916. The revenue is given by Gray as $1,308,875 (in line 12), or a balance of but $86,959, so-called profit from the existing scale of rates, in lieu of $253,578 shown by Gray, without taking taxes into account. This $86,959 is applicable to a return on a property value of $17,295,851. Six per cent of that figure is $1,037,751, as contrasted with $85,959 being received, even according to Mr. Gray. If the value of the terminals be excluded, leaves a value of $11,776,037 including equipment and 6 per cent of that sum is $706,562, to which this company would be entitled at 6 per cent, even according to Mr. Gray, in lieu of $86,959, actually being received according to his exhibit.

If Mr. Gray's cost be raised 20 per cent so as to charge logs with their proportion of the cost of non-revenue freight, we must add the sum of $211,059 to his cost of $1,055,297. Then deduct the profit of $86,959, which is left under Mr. Gray's

computation after allowing for taxes, and we have a net operating loss, including taxes, of $124,100.

The necessity of allowing for the cost of hauling the non-revenue freight and charging the log traffic with a just share of that cost was afterwards conceded by Mr. Gray (Trans. 852-854), and is apparent. The non-revenue freight consists of fuel, ties and other railroad material and supplies which move for the benefit of the log service, as well as every other service, and a proper proportion of the cost of their movement must be assigned to the log traffic. The Department made this allowance in determining its average system cost per thousand gross ton miles at $5.321 (Finding No. 13, Trans. p. 25), as contrasted with Mr. Gray's figure of $4.48 (Trans. p. 89).

That Mr. Gray's exhibits do not and were not intended to show the cost of log transportation appears from his testimony in substance as follows:

That he took the average cost per thousand gross ton miles for the entire state and applied the expense to the log traffic. That if the expense of conducting the log traffic is not the average expense of all the traffic, then his figures are wrong.

"I have taken the freight traffic within the State of Washington as a whole, put it all into a jackpot. * * * I assumed the empty car miles in the log business as compared with the loaded car was the same as on other traffic. I did not take into consideration the length of haul, but am dealing with the freight traffic as a whole. I have never stated that the figure I have introduced here represents the cost of handling logs. I have simply stated that taking the traffic in the state as a whole, of which logs is a large part, and reducing it down you get a certain gross figure, and applying that to the log business, you get a certain result."

"I don't know what the cost of handling the log business is as distinguished from the entire business. I don't know whether the log traffic produces more in proportion to the expense than other traffic. I am not a traffic expert. I have not differentiated between long and short hauls."

"I have not attempted to analyze the cost of handling the various kinds of traffic."

"I have made no effort to determine the cost of handling log traffic." (Trans. p. 642 et seq.)

Supervisor Cleland called the witness' attention to the fact that if his exhibit showed a profit on logs of an average haul of 31 miles and a loss on all other traffic with a haul of 200 miles, there is a profit being made on the short haul and a loss on

the long haul, and the witness states that his exhibit would indicate that. (Trans. 651.)

"Now when you determined the cost of the log haul you applied the cost based on the longer operations where you have a longer haul, so then you have introduced an element which is misleading as to the actual cost of that log business.

"A. I have never contended that these figures represent the actual cost of hauling logs."

A member of the Department again called the witness' attention to the fact that his theory indicated a profit on the short haul and a loss on the long haul, to which he replied:

"Well, it might be. I wouldn't be prepared to say. Apparently my head is not working clearly." (Trans. p. 651-2.)

Cost Theories Contrasted

It is seen from what has been said that three theories for computing results of log transportation are offered, namely:

(a) Department's Theory: The Department found the average cost of all *revenue* freight on the four transcontinental systems to be $5.321 per 1,000 gross ton miles. Then took the total gross ton miles of log traffic on the four lines and mul-

tiplied that by said average cost of $5.321, thus arriving at what was assumed to be total cost of log transportation on the four systems. Then added taxes. From this figure was deducted total revenue of the four carriers, and the difference is called net profit of the four lines of $818,448. The department's theory was of its own invention.

(b) GRAY'S THEORY: Mr. Gray found the average cost per 1,000 gross ton miles of all freight traffic on each line in the State of Washington; then multiplied that cost by the gross ton miles of log traffic on each line to find total cost of log traffic; then deducted the revenue, and the result is called net profit from log traffic. But, unlike the Department, Gray did not charge logs with 20 per cent additional for cost of *non-revenue* freight; nor, unlike the Department, did he allow anything for taxes. By his method a combined profit of $727,251 is shown for the four roads. (Gray's Ex. 4, line 13, Rec. p. 89.)

(c) CARRIERS' METHOD: The Northern Pacific company found the cost of all traffic on main and branch lines of Seattle and Tacoma divisions, where logs move; then the log traffic on main and branch lines was ascertained; then multiplied the average

main line cost and the average branch line cost for all traffic by the log mileage on main and branch lines and added 11 per cent of gross receipts from logs as state taxes and revenue proportion of federal taxes assignable to logs, then deducted the revenue. A similar method was pursued by the O.-W. R. & N. Company with the addition of an amortization charge for one of its short-lived logging branches. These methods assumed that log traffic cost the same as all other traffic on the same divisions. The assumption was justified by *uncontradicted proof* that in fact log traffic is more expensive than all other traffic, *although we have charged logs with only the average in determining the net result of log transportation.*

The Great Northern did not use any system of averages in preparing its cost data, but found by direct intensive study the actual cost of its largest log operation—an operation previously found by the Public Service Commission to be the least costly upon its lines in the state. The result was extended to all Great Northern traffic in the state, thus understating the true cost of the traffic as a whole.

State Court's Decision

The state supreme court upheld the Department's method of computing the cost of log traffic on the authority of *St. L. & S. F. R. Co. v. Gill*, 156 U. S. 649. It is said that a branch line rate can not be determined by the result of operations on the branch line alone, since such a rate would be prohibitive. The *Gill* case is quoted as follows:

"The company cannot claim the right to earn a net profit from every haul, section or other part into which the road might be divided, nor attack as unjust a regulation which fixed a rate at which some part would be unremunerative."

The state court then says:

"We are satisfied that the board of public works proceeded upon a fundamentally right basis in determining that the cost of the entire system should be taken into consideration in determining the cost in the State of Washington, since interstate and intrastate commerce are interdependent upon each other. One could not exist extensively without the other."

The learned author, however, missed the point of our contention. We are not asking for a remunerative rate from the traffic on any particular line or part of the system in the state, but such a rate as

applied to the *entire traffic* to which the Department's order applies. In *Northern P. R. Co. v. North Dakota*, 236 U. S. 585, 600, 59 L. E. 735, 743, the *Gill* case is distinguished as follows:

"In St. L. & S. F. R. Co. v. Gill, 156 U. S. 649, a statute fixing a maximum rate for passengers in the State of Arkansas was challenged, but the allegation and offer of proof * * * related only to a portion or division of the railroad, *and not to the result of all the traffic to which the rate in question applied.*"

In the *North Dakota* case it is decided that a state-made rate which will not permit of a fair return on the property devoted to the particular traffic as a whole, is unconstitutional. That is the principle upon which we rely in the case at bar.

The court will observe the view taken by the three dissenting justices. (Trans. 58.) The prevailing opinion is contrary to elementary principles and to this court's decisions in such cases as *Smyth v. Ames*, 169 U. S. 466; *Minnesota Rate Cases*, 230 U. S. 352; *Wood v. Vandalia R. Co.*, 231 U. S. 1; *Missouri Rate Cases*, 230 U. S. 474; *Northern P. R. Co. v. North Dakota*, 236 U. S. 585; *N. & W. R. Co. v. Conley*, 236 U. S. 605; *Vandalia R. Co. v. Schnull*, 255 U. S. 113. It is also in irreconcilable

conflict with the state court's own decision in *Public Service Commission v. State ex rel. Great Nor. Ry. Co.*, 118 Wash. 629, 204 Pac. 791, 207 Pac. 688, decided but a few months prior to the case at bar.

An unusual feature is the use of the weighted average system costs of the four carriers as cost of log transportation incurred by each of them. The cost factors, such as length of haul, volume of the traffic, amount of the investment, etc., are admittedly totally dissimilar on the several lines. The state court, itself, admits as much, saying: "It is admitted that the cost and revenue of one road would not be the same as the cost and revenue of another road. It is a fact, however, that the four carriers serve practically the same territory and they themselves submitted a uniform distance tariff. Railroads serving the same territory must have the same rates." The conclusion implied is that a rate confiscatory as to one carrier may be sustained if remunerative to another differently situated. In answer to this it suffices to quote from *Missouri Rate Cases*, 230 U. S. 474, as follows:

"The contention raised by the complainants, that these legislative acts cannot be enforced against one company unless enforced against all, cannot be sustained. The argument, in effect, is that al-

though the charges of carriers may be clearly exorbitant, the state is powerless to compel them to put in reasonable rates because as to another carrier differently situated the rates thus prescribed might be unreasonably low. The acts are valid upon their face as a proper exercise of governmental authority in the establishment of reasonable rates, and each complainant in order to succeed in assailing them must show as to it the rates are confiscatory."

This is to hold that the validity of the order depends upon its effect upon the particular carrier affected thereby, not its effect upon some other carrier differently situated, or its effect upon all of them taken together. See also *I. C. Commission v. U. P. R. Co.*, 222 U. S. 541, where the court says:

"It does not follow as a matter of law that rates should be the same for the same distance over two different roads, and this would be especially true if the cost of transportation was greater over the Union Pacific than over the northern lines because it crossed the mountains 2,000 feet higher than they."

The state court's decision in *P. S. Commission v. State ex rel. Great Nor. Ry. Co.*, 118 Wash. 629, 204 Pac. 791, 207 Pac. 688, reversing a log rate order, is in harmony with the cases cited and in conflict with the decision in the case at bar.

As an administrative question, the true principle for prescribing rates for competing lines is to consider the rights and interests of the weaker as well as the stronger road. The *Spokane* case, 15 I. C. R. 376, 392; Advance in Rates, 20 I. C. R. 243, 273; 10 Cor. Jur. 415, and cases cited. If the carrier cannot compete at a reasonable rate it is at liberty to retire from the business. *Brooks Scanlon v. R. R. Commission*, 251 U. S. 396. *R. R. Commission v. E. T. Ry. Co.*, Oct. term, 1923. Under the Transportation Act the right has probably been elevated to a duty. *Akron etc. Co. v. U. S.*, 261 U. S. 184. *Recapture case*, sub nom. *Dayton etc. R. Co. v. U. S.*, October term, 1923. That a carrier may not lawfully publish a confiscatory rate, even of its own volition, has been intimated by this court. *Keogh v. C. & N. W. R. Co.*, 260 U. S. 156.

Neither have the revenues from logs been apportioned to the several carriers. The supposed profit of $818,448, is the difference between the aggregate expenses and revenue of the four carriers. They are treated as a partnership. For aught that appears the supposed profit may have been earned by one of the companies. One or two of them may have earned more and the profit reduced to that figure by losses of the others. For a theory such

as this there is no warrant in reason or authority in law. If sound the invention will mark an epoch in judicial history.

Summing up this branch of the case we submit, (a) That the carriers' method of computing cost of log traffic is correct in principle and approximately accurate in the result; (b) That the Department's method is erroneous in principle and inaccurate in its result; (c) That the annual reduction in revenue from logs of $631,000 (Trans. 51) is confiscatory and takes the carriers' property without due process of law.

Finally we submit that the carriers' evidence cannot be rejected for the sole reason that it lacks perfect exactness. Precise correctness is an impossibility in any effort to determine the cost of a particular class of traffic on a large railroad. The revenues and expenses as a whole may be determined exactly, but when the accounts must be divided between freight and passenger traffic, and these divisions assigned to several states, and the state figures then distributed among numerous classes of traffic, it is obvious that an exact mathematical demonstration of the cost of a particular class of intrastate traffic is beyond the realm of possibility.

It would be a reproach to the law were the courts to deny relief merely because of the difficulties of proof. This court has not demanded the impossible of the carriers in this class of cases. It disregards the margin of error in the accounting data when plainly it is not sufficient to change the result. *Minnesota Rate Cases*, 230 U. S. 352, 472. In the present case the carriers have made an earnest and painstaking effort to prove the claim of confiscation, and while they do not claim exactness in the demonstration, they believe their case has been proved to a moral certainty, and that the following language from *Rowland v. Boyle*, 244 U. S. 106, is extremely pertinent:

"In establishing local rates a state must be assumed to intend to confine its action within the limits set by the Constitution, and not to seek an unjust advantage from the difficulties of dividing income and expense to which we have referred, but in this case the appellants have contented themselves with a purely negative attitude. There is made even a preliminary objection that the evidence is hearsay. We have not observed that the objection was taken when the evidence was introduced, and if not, it would be too late. Diaz v. United States, 223 U. S. 442, 450, 56 L. Ed. 500, 503, 32 Sup. Ct. Rep. 250, Ann Cas. 1913C, 1138. But it is enough to say that the railroad adopted the only practical mode of presenting its results, that it ex-

hibited its work sheets and data to the appellants, that the returns were made by the employees in the course of their business, and that if the appellants had desired to question any of the data they could have called for further verification. It seems to us that technical rules are satisfied, and that justice plainly requires this objection to be set aside."

B—Valuation of the Property

N. P. Ry. Co.

The Department fixed the value of the property on which a return was allowed at a grossly inadequate sum.

At the time of the hearing the Interstate Commerce Commission's valuation of the Northern Pacific operating property in Washington was almost completed. The commission's engineers and the company's engineers had reached a substantial agreement on the values. (Allen Tr. p. 700, Bryan Tr. p. 703.) The value of the lines west of Ellensburg, Washington, comprising the Seattle and Tacoma divisions to which log movement is confined, and which is the same territory for which operating costs were shown, is:

Land value	$ 27,266,798
Line and structures	105,528,279
Total	$130,259,852

These figures include the value of the terminals.

Excluding the terminal division values are:

Land	$ 5,580,267
Line and structures	84,578,225
Deduct Hartford line (not operated)	2,535,225
	$ 87,624,037

See N. P. Exhibit 47, Trans. 188. The detailed land valuations are shown in N. P. Exhibit 34, Trans. 117. Detailed line and structures in Exhibit 35, Trans. 119.

The witness, Allen (Trans. 700) offered Exhibit 34, Land Values, and Bryan (Trans. 703), Line and Structures.

The land value used is the so-called "naked land value" without the use of any factor, and has been substantially agreed upon by company and commission representatives. The line and structures are valued at prices of 1914 applied to the condition of the property as of June 30, 1917, plus additions and betterments to date, as determined by the Commerce Commission for the Northern Pacific. (Bryan Trans. 706.) It is not considered necessary to apportion to log traffic the value of the main and branch lines separately in proportion to use, because a computation made from the rec-

ord shows that on that basis $13,312,891, exclusive of the terminals, would be assignable, instead of $11,776,037, which we have assigned, as follows:

Log Proportion

The assignment to log traffic of its proper proportion is made on the basis of the use of the property by logs as compared with other traffic. (Minnesota Rate Cases.) The details are shown by Exhibit 47 (Trans. 188-189), as follows:

The total of land and lines at $130,259,852 is divided between freight and passenger according to the prescribed I. C. C. formula, 74.60 per cent. Freight proportion is $97,173,850. Then logs' proportion is assigned by taking 15.35 per cent of the freight proportion as log car miles on the division are 15.35 per cent of total freight car miles, or 6,085,316 (loaded and empty) out of 39,639,530. Logs' proportion is thus found to be $14,916,186. Then the equipment value is added of $2,379,662, giving a grand total of the value of the N. P. company's property devoted to log transportation of $17,295,851. (See Exhibit 47, Trans. p. 188, 189, Peterson Trans. p. 732 etc.) This total includes the terminal valuation. Following our method of separating operating costs, we show a value excluding

the terminals. The value, without the terminals, has been shown at $87,624,037. 15.35 per cent of this amount is $9,396,372. Add equipment at $2,379,-665 gives $11,776,037 as log proportion of total value, exclusive of the terminals. (Ex. 47 Trans. 188, 189; Peterson Trans. 732.)

There was no contradiction of this evidence of valuation. No other evidence whatever was offered on the subject. Not only was no issue made by defendants in error, but our valuation and the manner of its apportionment to the log traffic had the approval of O. O. Calderhead, the Department's statistician and traffic expert. He made a comparison between the tentative valuation agreed on between the representatives of the company and I. C. Commission, and states that if allowance should be made for additions and betterments since 1908 when the Washington Railroad Commission made a physical valuation of the property, but little difference would be found between the state and federal valuation. (Trans. 752.) With regard to the manner of apportionment of logs' proportion, he testified in substance as follows:

"I understand how your Mr. Peterson apportioned the property value to the log traffic.

"Q. Have you got the figures to compile that on a different basis?

"A. I do not know that I would care to compile it on a different basis.

"Q. So you would think the basis used by Mr. Peterson is fair? * * *

"A. I would be inclined to say so." * * *

(Trans. 757.)

GREAT NORTHERN VALUATION.

On December 31st, 1908, the Railroad Commission of Washington, pursuant to law, made findings of fact relative to the valuation of the Great Northern Railway in the State of Washington. Finding No. 94 recites "that the fair cash market value of all the lines operated by the Great Northern Railway Company in the State of Washington on the 30th day of June, 1908, was and is the sum of $59,577,212." (Second and Third Annual Reports of the Railroad Commission of Washington, p. 353).

The laws of Washington give the following effect to such findings:

"The findings of the commission so filed, or as the same may be corrected by the courts, when properly certified under the seal of the commission, shall be admissible in evidence in any action, proceeding or hearing, excepting with respect to matters of assessment and taxation, in which the state or

any officer, department or institution thereof, or any county, municipality or other body politic and the public service company affected is interested, whether arising under the provisions of this act or otherwise, and such findings when so introduced shall be conclusive evidence of the facts stated in such findings as of the date therein stated under conditions then existing, except as a basis for taxation, and such facts can only be controverted by showing a subsequent change in conditions bearing upon the facts therein determined."

Remington's Compiled Statutes, Section 10441.

There was no evidence of any change in conditions bearing upon the valuation so found, except that contained in Great Northern Exhibit 17 (Trans. p. 290), by which it was shown that net additions and betterments were made to Great Northern operating property in the state from June 30th, 1908, to December 31st, 1920, as follows:

Amount established by the Railroad Commission of Washington as of June 30th, 1908	$59,577,212.00
Net additions of property in the State of Washington from June 30th, 1908, to December 31st, 1920	23,324,873.56
Total value as of December 31st, 1920	$82,902,085.56

This valuation was not questioned by the state and is in large part verified by the Department's records (Trans. pp. 754, 755).

The proportion of this sum assignable to the log traffic, as calculated by various methods, is as follows:

Upon the gross ton mile basis	(1) $ 67,000 per annum
Upon the car mile basis	(2) $ 90,000 per annum
Upon an operating expense basis	(3) $108,000 per annum
Upon the basis of the charges found directly applicable to a typical operation (Trans. p. 792)	(4) $ 80,218 per annum

(1) This was the method preferred by the traffic expert of the Department of Public Works. The total state valuation was first divided between the freight and passenger business on the basis of the operating expenses of each, and the freight proportion of the value applicable to the log traffic was distributed on the gross ton mile basis (Trans, pp. 758, 759, 792).

(2) This method is identical with the first, except that the freight proportion of the value was

distributed to the various commodities, including logs, upon a car mile basis. This method was also approved by the Department's traffic expert, but was not considered by him so accurate as the first method (Trans. pp. 758, 759, 792).

(3) This method consists of separating the total capital charges in the state between the freight and passenger business on the basis of the operating expenses of each, as suggested by the Department's traffic expert, and then assigning to the log traffic its proportion of the freight expense on the basis of the relation of the log operating expense to the total freight expense (Trans. p. 792).

(4) This method consists of finding the capital charges directly applicable to a typical operation and then extending the result to all the log traffic in the state (Trans. pp. 791, 792).

In the Great Northern Railway Company's principal exhibit (Exhibit No. 23, Trans. 296, 303-304, 789, 790) the logs' proportion of state valuation was assigned on the last mentioned basis, which is somewhat more than $6,000 below the average of the four methods.

O.-W. R. & N. Valuation.

The O.-W. R. & N. valuation has already been mentioned in detailing the cost of log transportation on that line. The log movement on the O.-W. R. & N. is confined to the Grays Harbor branch and the North River line. The freight proportion of the valuation of these branches was determined upon an operating expense basis and the logs' proportion was then assigned on a gross ton mile basis. Interest on the resulting figure was taken at six per cent, amounting to $38,013. The logs' proportion of the valuation of the rolling stock assigned to these branches was similarly computed, amounting to $30,912—a total valuation for road and equipment of $68,925 (O.-W. R. & N. Exhibit No. 8, Trans, p. 315). Like the figures submitted for the other lines, the valuation proofs of the O.-W. R. & N. were not disputed. The Department and the intervening Loggers contented themselves with a perfectly negative attitude until the preparation of the findings some months after the hearing, in which the Department, upon the advice of its "experts," used the amazing method of valuation next to be explained.

Department's Valuation

The department's manner of determining the rate base, to which error is assigned (Nos. V and VII), is shown in Findings XIV and XV, as follows:

(XIV) "The present main track mileage of the four principal carriers within the State of Washington is 4,936 miles. The actual value of all the property owned within the state by such carriers, as shown by Great Northern Exhibit No. 25 (same being the minutes of the 1921 proceedings of the State Equalization Committee), is $294,360,243, of which $255,672,247 represents real property, while $38,687,996 represents rolling stock. The cost of the aforementioned property is unknown, valuation now in progress by the Interstate Commerce Commission being incomplete, but the Washington Railroad Commission found that the actual cost of 3,007 miles of main track within the state was approximately $50,000 per mile, which cost included terminals, rolling stock and all operating property of every kind. Upon the basis of a cost of $50,000 per mile, the property of the four principal carriers within the state would have a total cost of $246,800,000."

(XV) "For the purpose of estimating the approximate rate of return earned by the four principal carriers within the state from the log traffic during the year 1920, we will assume the value of the property of such carriers within the state

which is in any way used or useful in connection with the log traffic, is $300,000,000, a greater sum perhaps than the evidence will justify. Following the method of division as indicated by the carriers' exhibits, it is considered that not more than 75 per cent of such value, or $225,000,000 is assignable to the freight business within the state. During the year 1920 the gross ton miles of logs, hauled by the four principal carriers within the state, constituted 4.97 per cent of the total gross ton miles of revenue freight hauled within the state by such carriers. It is therefore considered that five per cent of that part of the value of the carriers' property assigned to freight service should represent the tentative rate base for use in determining the rate of return earned by the log traffic in 1920; this tentative rate base being $11,250,000."

(XVI) "Using the tentative rate base of $11,-250,000 and the net revenue over operation, taxes and depreciation accounts, or $818,448, it is seen that during the year 1920 which was a period of excessively high operating cost, the log traffic within the state earned a net return of 7.28 per cent which is in excess of the 6 per cent rate of return prescribed by the Interstate Commerce Commission under the Transportation Act of 1920 as a fair rate of return on the aggregate value of the property of the railroads as a whole, and a rate which the carriers have treated in this case as not unfair."

(The 7.28 per cent, it is to be remembered, is the rate of return *from the existing scale of log rates.*)

But this return is greatly diminished by the new method of computing minimum loads, as appears from Finding XXV, which is as follows:

"The promulgation of the rules designating an average carload minimum based upon the number of cars tendered the carrier in any one shipment will reduce the revenues of the carriers by an amount equal to the excess charges amounting to about 6 per cent, of the total charges, or approximately $150,000 per year, under the scale of rates herein prescribed. We have taken this into consideration and have fixed the basic rate sufficiently high to earn that additional revenue, that is to say, we have prescribed a rate that will produce six per cent more revenue than we would have prescribed had we not changed the rule as to minimum load."

The supposed return of 7.28 per cent is thus avowedly reduced to but 6 per cent *from the existing scale of rates*, but in Finding XXV the Department finds that its new schedule of rates reducing the existing scale about 20 per cent, will still return 6 per cent; or in other words, *that a 20 per cent reduction of rates will not have any effect whatever on the carriers' revenues.*

By Finding XXIII a penalizing lower rate and minimum is prescribed for cars not equipped with patent bunks. The amount of this additional loss cannot be computed from any data in the record.

That it will be considerable may be inferred from the importance which the intervening loggers attached to this feature.

It is apparent that the margin allowed between a confiscatory and fairly compensatory rate is negligible *even under the existing scale.* The new schedule prescribed by the Department 20 per cent lower than the existing schedule reduces the supposed return from 6 per cent to 4.8 per cent, without allowing anything for the effect of the patent bunk feature of the order. The reduction to the companies was found by the court to be $631,000 per annum. (Trans. 49.)

The return to be expected by the carriers as a whole from the new schedule being less than 4.8 per cent on the face of the findings and order, it is apparent that but a slight inadequacy of the rate base used by the Department will establish confiscation on the face of the record beyond controversy. *Minnesota Rate Cases,* 230 U. S. 352.

How erroneous and inadequate is the Department's valuation is apparent. The aggregate value of $300,000,000 assumed by the Department, of which $11,250,000 is assigned to log traffic, is utterly without support in the evidence.

In finding the $300,000,000 the Department considered that the assessed value of the four railroads in the state was $294,360,243, as shown by the minutes of the State Board of Equalization for 1921. (G. N. Ex. 25.) The cost of the property is said to be unknown, the Interstate Commerce Commission's valuation being incomplete. But the state railroad commission (*in 1908*) found the actual cost of 3,007 miles of main track to be $50,000 per mile, and on that basis the present value of the 4,936 miles of main track at present operated would be $246,800,000. In consideration of this it is assumed that the present value is $300,000,000, which is said to be a greater sum "perhaps than the evidence will justify."

In order to understand what the Department did it is necessary to explain what the railroad commission's valuation of 1908 actually was and how it was made. Chap. 81, Section 12, Laws of Washington, 1905, provided for a physical valuation of the railroads of the state. The section was amended by the Act of 1907, page 545. Pursuant thereto the Railroad Commission made and promulgated findings of value of the Northern Pacific at $110,308,-450, Great Northern at $59,577,212 and Oregon Railroad & Navigation Co. at $19,500,000. See

State ex rel O. R. & N. Co. v. Clausen, 63 Wash. 535, 116 Pac. 7, for full particulars. Section 5 of the 1907 Act, p. 545 (63 Wash. 537) provided as follows:

"The findings of the commission (as to value) so filed, or as the same may be corrected by the courts (on a review of the valuation proceeding itself) when properly certified under the seal of the commission shall be admissable in evidence in any proceeding or hearing in which the public and the railroad * * * company affected thereby is interested, and such findings when so introduced, shall be conclusive evidence of the facts stated in such finding or findings as of the date of filing *under conditions then existing*, and such facts can only be controverted or contradicted by showing a subsequent change in conditions bearing upon the facts therein determined."

Under this statute the state court held in the *Clausen* case, *supra*, that the R. R. Commission's findings of value were conclusive of the value for taxation, unless (as held in *S. & I. E. R. Co. v. Spokane County*, 82 Wash. 24, 143 Pac. 307), there had been a change in conditions since the valuation was made. But in 1913 the law was amended by the additions of the phrase, "except as to taxation," so that the law, since 1913, reads as follows:

"And such findings, when so introduced, shall be conclusive evidence of the facts stated in such

findings as of the date therein stated under conditions then existing, except *as a basis for taxation,* and such facts can only be controverted by showing a subsequent change in conditions bearing upon the facts therein determined."

> Rem. Comp. St., Sec. 10441, next to last paragraph.

After the 1913 amendment repealing the former law providing that the R. R. Commission's valuation should be conclusive for taxation, the state railroad commission made no further findings of value, that function then being committed to the uncontrolled judgment of the state tax commission for taxing purposes. (Trans. pp. 755-6).

Referring to Northern Pacific Exhibit 50, identified by Mr. Calderhead (Trans. 751), which is a statement showing gross earnings, expenses, taxes, net income and valuation by state board of equalization, years 1906 to 1920, it appears that the Northern Pacific valuation made by the R. R. Commission in 1908 was used as the assessed value for 1909, and was in round numbers $110,000,000. In 1911 it was $125,000,000 in round numbers. For 1912 it was $126,000,000 in round numbers, and has remained the same ever since up to 1920. Mr. Calderhead testified regarding this exhibit in substance as follows: (Trans. 751.)

"That is a statement showing the gross receipts, expenses, taxes, net income, valuation by the state board of equalization and earnings of the Northern Pacific for the years 1906 to 1920 inclusive. The figures showing gross receipts, expenses, taxes, net income in the first four columns are taken from the annual reports filed (as required by Rem. Comp. St., Sec. 10416) with the department of public works. The column headed "Valuation by State Board," was furnished by the Public Service Commission to the tax board. For instance, the figure for 1916 of $126,544,615 is the figure used by the state board of equalization and is the valuation furnished to that board by the Public Service Commission. That valuation was determined by the Railroad Commission in *1908* supplemented by permanent improvements up to 1912. That value was used every year since by the state board of equalization. *The taxing authorities have not added to the value of the railroad property anything for additions and betterments since 1912 as shown on the face of the exhibit.* I assume there have been additions and betterments of the property since that time. Q. So that as a matter of fact the value if taken today would be far in excess of this $126,000,000 used? A. I would believe that it would, yes, sir.

"The railroads continued to file their statements of betterments and improvements, but the commission did not find any further valuation. It no longer controls the tax commission so it is not necessary to certify the valuation to it, because the Act of 1913 repealed the former provision that the valua-

tion found by the public service commission should be used for taxation.

"All of the railroads except the Milwaukee have been valued by the commission and continued to file up to date statements annually showing additions and betterments so that we could take the valuation as originally found by the railroad commission and add to it all additions and betterments and obtain the valuation of all roads, except the Milwaukee and Bellingham & Northern and National Park Line, branches of the Milwaukee."

It thus appears that the $50,000 per mile referred to in Finding XIV is the average cost of the Northern Pacific, Great Northern and Oregon Railroad & Navigation Company, as found *in 1908* while the value for taxation of $294,360,243 only includes the valuation found for the Northern Pacific in 1908 plus additions to *1912*, whereas had the commission added the additions and betterments to date of the hearing that company's present value would be far in excess of that used for taxation in 1921. The Great Northern's value was supplemented by additions to 1916 only as stated by Mr. Calderhead (Trans. p. 754). Net additions and betterments from 1908 to 1920 have brought the valuation of Great Northern properties in the state up to $82,902,085. (G. N. Exhibit 17, Trans. p. 290 et seq.), while the value used by the State

Equalization Committee for that year (reflecting additions up to 1916) was only $70,480,255. (G. N. Exhibit 25, Trans. p. 308, et seq.) We do not know how the valuation of the Oregon-Washington Company was fixed for 1921 by the board of equalization. The Milwaukee never was valued by the Railroad Commission as it was not constructed until after 1908.

It is to be at all times remembered that the valuation was of the railroads *as a whole*, not by divisions, so that there never was made by the state any valuation which would show the value of the property used in the log traffic (Tr. 756, 57). But what has been said does show clearly that had the department added the betterments to date of the inquiry the assessed valuation of $294,360,243 which is raised to $300,000,000 would have been far in excess of that figure; and if it saw fit to refer to the valuation of 1908 it was bound to add the additions which the reports made to it, pursuant to Sec, 10416, showed had been made since the final figure was fixed in 1912 or 1916, as explained by its own expert, Mr. Calderhead. (Tr. 756.) To do so was expressly made obligatory upon it by Sec. 10441, and the decision of the state court, con-

struing this section in *State v. Kuykendall*, 119 Wash. 107, 205 Pac. 3. In view of this, whether the department intended to treat the carriers fairly in the matter of the valuation of their property, is a question which answers itself.

A mere statement of what was done by the department is enough to condemn its valuation.

(*a*) The assessed valuation is no evidence of true value, especially where, as here, it is affirmatively shown to be grossly inadequate. *Knott v. C. B. & Q. R. Co.*, 230 U. S. 474. (*b*) To assign to log traffic a per cent of the total valuation in the state was error, for logs move almost entirely on the west side divisions. The proper basis was to ascertain the value of the property used in the log traffic (*N. P. R. v. North Dakota*, 236 U. S. 585), and to assign to log traffic that percentage of such total value as log traffic bears to the total traffic on such lines. (*Minnesota Rate Cases*, 230 U. S. 352.) (*c*) To use a percentage of the aggregate value of the four companies' property in the state, and assign that as the aggregate value of the four companies' property devoted to log transportation is a monstrous error. It involves an assumption of transportation on each of the roads involved.

Neither of these conditions is even claimed to exist. Thus, for 1920 the Northern Pacific hauled 101,-725 cars of logs, the Milwaukee 88,848, the Great Northern 21,483, and O-W. R. & N 15,892. Log car loaded miles are 3,192,595 on Northern Pacific of a total of 6,139,834 for the four companies. (Log Shippers' Ex. 2, Trans. 86.) Average hauls are Northern Pacific 31 miles, Great Northern 32 miles, Milwaukee 23 miles and O-W 15 miles.

The total gross ton miles of all freight in Washington, as compared with the total gross ton miles of logs on the several lines, were:

	Total All Freight	Total Logs
Northern Pacific	3,863,664,519	191,683,564
Great Northern	1,896,743,278	37,975,889
C. M. & St. P.	1,772,600,093	117,031,358
O. W. R. & N.	1,036,570,068	14,744,623

(Trans. p. 88, fol. 196a-10).

The use of the property made by the log traffic, as measured by the ratio of the log traffic to the total traffic, computed from the above figures, is:

Northern Pacific	4.9%
Great Northern	2. %
C. M. & St. P.	6.6%
O.-W. R. & N.	1.3%

The department's method does not determine the value of the property of any of the companies,

notwithstanding that the validity of its order as to each of the companies depends upon its effect on the particular company, not on its effect upon some other company, or upon all of them taken together. *Missouri Rate Cases*, 230 U. S. 474; *Minnesota Rate Cases*, 230 U. S. 352; *Northern P. R. Co. v. North Dakota*, 236 U. S. 585. (d) The Department's value is of the year 1908, supplemented by additions to 1912 on the Northern Pacific and to 1916 on the Great Northern. It takes no account of cost of reproduction, less depreciation, as of the date of hearing of this case. Neither is anything allowed for additions between the years mentioned and date of the inquiry. In *S. W. Bell Tel. Co. v. P. S. Commission*, 262 U. S. 276, and *Bluefield Water Works v. P. S. Commission*, 262 U. S. 679, it is held that the corporation is entitled to a fair return, at current rates for similar enterprises, on the value of the property *as of the date of the inquiry*, and because this factor was ignored in these cases the rate order was reversed.

On the other hand, it is submitted that the joint federal and company valuation, as near complete as it was on the Northern Pacific, is the best available evidence of true value. When completed, pursuant to Sec. 19a of the amended act to regulate

commerce, it will be conclusive. By Sec. 15a it is provided that the commission shall make use of the result of its valuation in determining the sum to which the carriers are entitled as a fair return. The commission, in Ex. p. 74, 58 I. C. C. 220, made use of its incomplete valuations. It did so again in Reduced Rates, 1922 68 I. C. C. 676, 684, where it said:

"More than twenty months have passed since our former determination (Ex. p. 74) and in that period the valuation of the railroads under Sec. 19a has gone forward. The work is still incomplete, but has progressed to such an extent that we may accept the results with fuller assurance, both as to particular roads and as showing general trends and principles."

The federal valuation, when complete, is necessarily exclusive for state as well as interstate purposes. *C. B. & Q. R. Co. v. R. R. Commission*, 257 U. S. 563. The act provides for a valuation of "all the property owned or used by every common carrier subject to the provisions of this act." The property can have but one true value for rate making purposes. Sec. 15a provides, also, for calculating the fair return on "the aggregate value of the railway property of such carriers held for and used in the service of transportation." Consistently with these provisions the state cannot value

the property at a lesser sum for computing a fair return from state traffic than is fixed by the Interstate Commerce Commission for interstate traffic and traffic as a whole. To do so would burden interstate commerce. *C. B. & Q. R. Co. v. R. R. Commission*, 257 U. S. 563.

On the review in the superior court error was assigned to the department's valuation. (Trans. 42.) On appeal to the state supreme court the point was argued at length. (Page 33, brief of N. P. R. Co., and pages 91-96 of brief of G. N. Ry. Co., of which copies are in this record.) The state court did not refer to the point at all. It determined that the carrier was earning a fair return *without finding any value upon which the rate of return could be computed.* It seems, therefore, to have accomplished the impossible. (Justice Brandeis concurring in *S. W. Bell Tel. Co. v. P. S. Com.*, 262 U. S. 276.)

We submit that the carriers are entitled to a rate base at least as high as claimed by their testimony.

SECOND.

The affirmance by the State Supreme Court of the Department's order, which was based upon findings made without evidence, deprived the several plaintiffs in error of their property without due process of law. (*Assignment* 10, *Trans. p.* 69).

In the foregoing discussion it has been pointed out that the findings of the Department of Public Works were in many respects not supported by any evidence, and in other respects were contrary to the undisputed evidence. Only the most glaring examples of this character will be here summarized:

First: The Department arbitrarily assumed that the cost of freight operation on each of the four lines in Washington was the same as the average cost of hauling all freight on their combined systems (Finding 13). This finding was made utterly without evidence and in the face of the undisputed fact that the cost of operation per 1,000 gross ton miles on the four lines varies as follows:

	Entire System	State of Washington
Northern Pacific	$4.23	$5.51
Great Northern	4.48	6.97
C. M. & St. P.	4.55	6.11
O. W. R. & N.	5.43	6.61

(Trans. p. 89).

R.A. 20 — 5.31

Second: The Department next assumed that the cost of hauling logs upon the several lines in Washington was the same as the average cost of hauling all freight upon the four combined systems. In so doing it acted utterly without evidence and disregarded the evidence submitted by the several plaintiffs in error, showing the actual costs incurred by them respectively in handling the log traffic in a limited section of the State of Washington.

Third: In valuing the property, the Department arbitrarily assumed, without the slightest evidence, that the *value* of the property of these four carriers in the State of Washington in 1920 should be measured by the average *cost* per mile of the railroads which existed in the state in the year 1908, and by a figure used for taxation purposes which did not include additions to the Northern Pacific since 1912 and to the Great Northern since 1916. (Trans. pp. 751-754.) (Finding No. 14, Trans, 25, 26). It completely disregarded the evidence submitted by the four carriers of their actual value in the year 1920.

Fourth: Having used the foregoing method to determine the aggregate value of the four carriers

in the state, the Department next arbitrarily assumed that the measure of the use of the companies' respective properties in the log traffic was the same on all lines, namely 4.97%. (Finding 15, Trans. p. 26.) This was contrary to the undisputed evidence, which showed that the percentage of use of the several properties in the log traffic was 4.9% on the Northern Pacific, 2% on the Great Northern, 6.6% on the C. M. & St. P. and 1.3% on the O.-W. R. & N. (Supra, p. 109.)

There is no dispute that wide and material variations exist between the values of the properties of the different companies involved, between the measure of the use of their respective properties in the log traffic, between the revenues and rates now charged, and between the operating cost of the traffic on the several lines. As illustrative of these conditions the following statistical figures may be noted:

Total number of carloads of logs hauled in 1920:

Northern Pacific	101,725
Great Northern	21,483
C. M. & St. P.	84,848
O.-W. R. & N.	15,892

Average length of haul of loaded car of logs:

Northern Pacific	31.38 miles
Great Northern	32.02 miles
C. M. & St. P.	23.81 miles
O.-W. R. & N.	15.02 miles

Average revenue per loaded car of logs:

Northern Pacific	$12.88
Great Northern	14.83
C. M. & St. P.	12.17
O.-W. R. & N.	12.55

Average revenue per M feet, B. M.:

Northern Pacific	$1.672
Great Northern	2.269
C. M. & St. P.	1.668
O.-W. R. & N.	1.542

Average revenue per loaded car mile of logs:

Northern Pacific	$0.40997
Great Northern	0.46294
C. M. & St. P.	0.51090
O.-W. R. & N.	0.83556

Average revenue per 1,000 tons of logs per mile:

Northern Pacific	$12.80
Great Northern	17.00
C. M. & St. P.	17.08
O.-W. R. & N.	24.74

(Associated Log Shippers' Revised Exhibit No. 3, Item 12; Trans. p. 88, fol. 196a-9.)

The Department ignored all these differences and attempted to average everything upon the basis of one aggregate valuation and one average operating cost. The average operating cost used was not even the average operating cost in the state, but was the average of the four combined systems extending over the entire Northwest. The four carriers were treated as a partnership which was operating

cheaply in other states and ergo could not be incurring any greater expense in Washington. The result was to reduce rates and revenues as follows:

	Gross Revenue from Logs in 1920	Reduction Ordered	Percentage of Reduction
Northern Pacific	$1,308,875	$200,000	15.28%
Great Northern	318,490	120,000	37.68%
C. M. & St. P.	1,032,357	271,000	26.25%
O.-W. R. & N.	199,450	40,000	20.01%

(Trans. p. 88, fol. 196a, Trans. p. 51.)

The immense reduction imposed upon the Great Northern was made, not only in defiance of the statistical figures showing its operating cost to be the highest in the state per unit of traffic (Trans. p. 89), but in disregard of the testimony of the Commission's own expert that the Northern Pacific would earn a return at a lesser rate than the other roads and could stand a greater reduction. (Trans. 754.)

Each of these plaintiffs in error was separately entitled to compensatory rates. The profits of some could not be used to balance the losses of others. *Minnesota Rate Cases*, 230 U. S. 352; *Missouri Rate Cases*, 230 U. S. 474; *Northern Pacific v. North Dakota*, 236 U. S. 585. The order was valid only if the findings were established by the evidence.

"The burden was on the commission to establish the allegations in the complaint. That body, as well as the carrier, was charged with notice that the reasonableness of the order was to be determined by what appeared at the hearing before it. The insufficiency of the evidence submitted to the commission could not, under this statute, be supplied on the judicial review by a presumption arising from the failure of the carrier to disprove what had not been established."

State ex rel. Oregon R. & N. Co. v. Fairchild, 224 U. S. 510, 56 L. Ed. 863.

The order cannot be sustained upon a presumption that the Commission was authorized to secure, and presumably had secured knowledge not introduced in evidence which would sustain the order. *Interstate Commerce Commission v. Louisville & N. R. Co.*, 227 U. S. 88, 93; *B. & O. R. Co. v. U. S.*, 264 U. S. ——, decided March 3, 1924, U. S. Supreme Court Advance Opinions, April 1, 1924, No 11, p. 354, 356; *U. S. v. Abilene & S. R. Co.*, —— U. S. ——, decided May 26, 1924, U. S. Supreme Court Advance Opinions, June 16, 1924, No. 16, p. 593, 598; *State ex rel. Great Northern Ry. Co. v. Railroad Commission*, 60 Wash. 218, 232; 110 Pac. 1075.

This point is elaborately developed in the separate brief submitted in behalf of the Chicago, Mil-

waukee & St. Paul Railway Company, and these carriers, instead of extending the discussion, will adopt the argument on this phase of the matter submitted by their co-appellant. It is submitted that, apart from the issue of confiscation, the material findings of the cost of the log traffic and of the property value must be set aside because they are not supported by any evidence.

Apportionment of Expense to Washington

Apparently realizing the enormity of its assumption that cost of log traffic in Western Washington could be measured by the average system cost of the four companies, the Department offered the following findings by way of explanation:

IX.

"The operating revenues assigned to the State of Washington are made up of revenues from intrastate traffic, plus a part of the revenue from interstate traffic assigned to the State of Washington upon a straight mileage basis. However, the operating expense assigned to the State of Washington embraces all of the expense incurred within the state and includes all of the assembling and terminal expense on interstate freight. During the year 1920 the unit freight operating cost charged

to the State of Washington by the four principal carriers was approximately 35 per cent in excess of the combined system average unit freight operating cost. According to the reports of these carriers, their combined systems earned a net profit in freight operation during the year 1920 of $12,943,697, whereas freight operations in the State of Washington are reported to have resulted in a loss of $6,934,966.

X.

"The unit freight operating cost within the State of Washington would be no greater than the system unit freight operating cost if the assembling and terminal expense in connection with interstate shipments is apportioned over the entire length of haul. Whatever increased cost may result from the haul over the Cascade Mountains is offset by the favorable climatic conditions within the State of Washington, as compared with the rigorous winters in the neighboring states of Montana, the Dakotas and Minnesota, which hamper the movement of freight, with a corresponding increase in unit operating cost, and the Cascade Mountains are certainly no more formidable than the Rocky Mountains. If the unit freight operating cost incurred by the four principal carriers within the State of Washington is no greater than the system unit freight operating cost, then the freight traffic within the state during the year 1920, instead of producing a loss of $6,934,966, actually yielded a profit of $6,694,432. Whatever the correct rule for the allocation of terminal and assembling expense

in relation to interstate traffic may be, it is not properly chargeable to the log traffic of this state." (Trans. p. 23.)

The argument here is that the carriers' apportionment of revenue and expenses to Washington is unfair. The criticism is briefly this: Washington is a terminal and originating state. The assignment to Washington of revenues from interstate traffic is on a straight mileage basis, but the assignment of operating expenses embraces all of the expense incurred within the state and is in greater proportion to the total expense of interstate traffic than a mileage prorate. In the next finding it is said that this is unfair and that the "unit freight operating cost within the State of Washington would be no greater than the system unit freight operating cost if the assembling and terminal expense in connection with interstate shipments is apportioned over the entire length of haul." Note that it is here not denied that the unit operating cost in Washington is actually higher than on the systems as a whole. But it is contended that *cost locally incurred in Washington* should be *assigned to other states* and the Washington cost thus reduced. The cost so to be assigned elsewhere is not merely terminal expense, strictly speaking, but in-

cludes the expense of "assembling" freight as well. The meaning of this is apparent from the testimony of Calderhead and Gray that: "The terminal expense as we have considered it in the State of Washington has included not only expense in the through, the larger terminals, but expense as generally understood of assembling these cars from the branch lines into solid train loads on main lines, so that the actual terminal expense, which increases the operating expenses in the State of Washington, does not fall entirely to the larger terminals." (Trans. 837). And from the statement in the Attorney General's brief in the State Supreme Court, where it was said on page 39:

"Branch lines and the expense incurred thereon are peculiarly a feature of terminal division operation. Their existence is essential to afford sufficient volume of traffic to render main line operation possible and profitable."

But these branch lines, the operation of which augments the state cost, are the very locus of the greater portion of the log traffic (Finding XI, Trans. p. 24). If the expense of their operation, therefore, instead of being assigned where incurred, be spread over the entire system, it is obvious that the logs will be relieved of bearing a fair use pro-

portion of their own handling cost and that traffic elsewhere on the system will have to make up the loss.

What the Department has really done is to confuse the question of allocating revenue with that of allocating expense. There may be some plausibility in contending that interstate revenue should be assigned to Washington in greater proportion than by a mileage prorate in order to be comparable with the method of assigning expense to the state; but that is a question which appertains solely to interstate traffic. It is not denied—in fact, is asserted—that the reason operating expenses per unit of traffic are higher in Washington than on the system is because *higher expenses are actually incurred in Washington* (Findings IX, X, Trans. p. 23). The Department would assign these higher expenses elsewhere than the place where they are incurred, in order to relieve Washington intrastate freight of a portion of its handling cost. But the law forbids. Intrastate freight must be charged with a proportion of the *actual* expense *incurred in the state* on the basis of use. (*Minnesota Rate Cases*, 230 U. S. 352). And surely it is entirely proper to charge log traffic with the average expense of traffic on the divisions where logs move. *Wood v. Vandalia R. Co.*, 231 U. S. 1.

By what process is a part of the expense incurred in Washington to be prorated to other states? None is or ever has been suggested by defendants in error. Again, if part of the expense of Washington is to be apportioned to Minnesota, by the same reasoning a part of Minnesota expense must be apportioned to Washington. The criticism seems to have originated with counsel for defendants in error nor has it any advocate except its author. The accounts are kept as required by the Interstate Commerce Commission, and in *A. C. L. R. Co. v. Daughton*, 262 U. S. 413, 417, Mr. Justice Brandeis appears to have used some pertinent language in saying:

"Seaboard, being an interstate carrier, the accounts were kept as required by the Interstate Commerce Commission. Interstate business was apportioned, as customary, according to mileage."

See, especially, *Rowland v. Boyle*, 244 U. S. 106. 106.

The language is, of course, equally applicable to intrastate business, the accounts having been kept as customary and reports made to the state, as required by its own law.

But even if mistaken in what has been said, the Northern Pacific Company produced a line of ex-

hibits to prove that Washington is properly chargeable with a higher cost than the system as a whole. (a) Washington branch line mileage with the consequent higher expenses is in excess of the average of the system or of any other state. (Trans. 710, Ex. 37-38, Trans. 172.) Taxes in Washington are higher than in any other state. (Trans. 714, Ex. 39, Trans. 173.) Washington taxes are 11.14 per cent gross receipts as compared with but 5.42 per cent in Minnesota, the other terminal. (Trans. 715.) In addition to the conditions peculiar to the Northern Pacific which have been cited, it is undisputed on the record that one-half of the total tonnage handled annually by the Great Northern system is iron ore originating at one place and terminating at one place in Minnesota, handled in train loads from six to eight times as large as the average train load of logs, and consequently at lower expense. (Trans. p. 808.) Intrastate traffic in Washington is a greater percentage of the total than in any other state. (Trans. 716.) Of course the short haul intrastate traffic is more expensive than the long haul interstate. Besides, Washington has a full crew law in Rem. Comp. Stat. Secs. 10486-87. When Mr. Gray, who by the way, is not a railroad accountant nor a traffic

expert, but an engineer, commented on the excess cost chargeable to Washington as compared with the system cost per 1,000 g. t. m., for which he could not give a reason, Mr. Calderhead volunteered the following explanation:

"MR. CALDERHEAD: Possibly the explanation that you are seeking for your figures lies largely in the fact that there are more branch lines in the State of Washington than in other states, in proportion to its main lines, and that the percentage of state ton miles to interstate ton miles is greater in this state than in any other state with the exception of the single road of the O.-W. R. & N." (Trans. 638.)

The excess cost chargeable to Washington per 1,000 g. t. m. is only as 130 to 100 (Trans. 637), and for this there is not only the authority of long continued practice approved by the state, but good reason as well.

In brief, there is not the slightest justification to sustain the Department's contention that the actual expense of freight traffic in Washington should be reduced by assigning part of it to other states. Nor is there the slightest evidence to sustain the statement that even if this were done the unit freight operating cost within the State of Washington would be no greater than upon the systems. In the first place, geographical conditions belie the

Commission's finding that freight traffic can be as cheaply handled in Washington as on the Great Plains east of the Rocky Mountains. In the second place, statistics already quoted show that the volume of traffic which is a controlling factor in determining cost, is far greater upon the systems as a whole than in the State of Washington. In the third place, as just stated, the ratio of branch line to main line mileage in Washington is not the same as on the systems, and many other local conditions increase Washington costs. It is therefore submitted that the Department's views with respect to the cost of freight operation in Washington are both unjustified by reason and contrary to the evidence in the case, and that the order based upon findings so reached must be set aside.

THIRD.

The carriers are entitled to a schedule of log rates at least as high as those named in Tariff No. 29. The denial of those rates takes their property without due process of law.

The circumstances leading up to the filing of the tariff of advanced rates appear in the preliminary statement.

The Department, having determined the operating costs and value of the property, as shown, as a matter of course, condemned the advanced rates, and its order in that respect was affirmed by the state court. Assignment of Error No. XI., Tr. p. 68 is directed to this action.

A—*Right of the Northern Pacific to Tariff 29 Rates.*

It having been proven by Exhibit 18 and Peterson's testimony that the Northern Pacific sustained a net operating loss in 1920 (without taxes or interest) of $539,334, and that the showing is no better for the first half of 1921, even assuming that log transportation is no more expensive than the average of all traffic on the two divisions, (an assumption which is contrary to the undisputed proof showing that log traffic costs substantially more than the average), we next undertook to show what scale of rates would be needed in order to wipe out the deficit and return 6% on the value of the property. In making this showing it was necessary to assume that the log traffic would continue to be as heavy as in 1920, while the operating expenses were figured on the reduced cost basis of 1921. It will be seen, therefore, *that the doubtful factors are resolved against the company.*

Exhibit 47, prepared by Peterson (Tr. p. 185) makes this showing, and his method is as follows: (Tr. 732.)

He first increased the actual 1920 revenue for the first eight months by 25% so as to allow for Ex Parte 74 increase of 25% effective August 26, 1920, and then added the actual revenue from August 26th to the end of the year. The amount so found is $1,524,460, and is the revenue that would have been earned had the 25% advance been effective during the entire year 1920. · He then added $16,000 for switching and demurrage and finds total revenue on basis of present rates and 1920 log movement to be $1,541,060. Then he finds the operating expense for 1920, but using the *reduced labor costs of 1921*, to be $1,778,439. To this he adds taxes of $166,619, being 11% of log revenue plus income tax, or a total operating expense and taxes of $1,945,058. The difference between the revenue of $1,541,060 and the expense of $1,945,058 is $403,998. (See sheet 1, Ex. 47.) 6% on value of property assigned to logs, as before explained, is $1,037,751, and adding to the operating deficit of $403,998, gives $1,441,749 as the amount of additional revenue needed to wipe out the operating deficit and return 6% on the

value of the property, assuming that traffic remained as heavy as in 1920 and the cost would be on the basis of 1921 (see sheets 2, 3, 4, Ex. 47) (Tr. p. 185). Sheet 4, Ex. 47, shows the valuation testified to by Allen and Bryan, at $17,295,851, including the terminals. 6% of this valuation is $1,037,751. On the right side of sheet 4, the valuation, excluding the terminals, is shown as $11,-776,037. 6% on this is $706,562.

On sheet 5 of Exhibit 47 equated operating expenses are shown. Including the terminals, the deficit is $403,998, and excluding the terminals is $136,420. On the same sheet 5 the additional revenue needed to absorb the operating deficit and earn 6% on the value of the property, including the terminals, is $1,441,749, and excluding them is $842,890.

As before explained, the carriers were asked to submit a scale of rates that would be acceptable, and Tariff No. 29 was filed accordingly, but without prejudice to our right to claim a compensatory scale, which Tariff 29 is not. The tariff was suspended, as before stated. The distance scale of rates prescribed by Tariff 29 is practically the same as the scale of rates submitted by Peterson as a compensatory scale, *excluding the terminals.*

We print the following schedule showing the Northern Pacific's distance scale, the two compensatory scales submitted by Peterson, that is the scale of rates needed if the terminals be included, and the scale needed if the terminals be excluded, the department's scale fixed by its order, and Tariff No. 29 scale.

Single Car Rates

Distance	Present Rates Incl. 25% Advance Aug. 26, 1920 Distance Scale	Rates Based on Compensatory Return (Incl. Puget Sound Terminals)	Rates Excluding Puget Sound Terminals (See Note)	Rate Prescribed by W. D. of P. W.	Proposed Rates S.J. Henry No. 29
1 to 5	156½	248	198½	1.15	200
6 to 10	156½	248	198½	1.25	225
11 to 15	195½	310	248	1.35	250
16 to 20	211½	335½	268	1.45	270
21 to 25	219	347½	277½	1.55	280
26 to 30	227	360	288	1.65	290
31 to 35	234½	372	297	1.75	300
36 to 40	242½	384½	307½	1.85	310
41 to 45	250	396½	317	1.95	320
46 to 50	258	409	327	2.05	330
51 to 55	265½	421	336½	2.15	340
56 to 60	274	434½	347½	2.25	350
61 to 65	281½	464½	357	2.35	360
66 to 70	289½	459	367	2.45	370

NOTE: Based on average of 8,000 feet per car on traffic hauled in 1920. Variation in percentage of increase due to fractions. Excluding terminal eliminates expenses and land valuation of Puget Sound Division and track and structures and valuation of Seattle, Tacoma and Auburn terminals.

NOTE: Sheet 6 of Exhibit 47 was omitted by oversight of printer. But see Peterson's testimony, Trans. 737-39.

Referring to the schedule, the rate for 26 to 30 miles, representing the average haul on the Northern Pacific, shows a compensatory rate submitted by Peterson, excluding the terminals, is $2.88 per thousand feet, while Tariff 29 rate is $2.90 per thousand feet. These comparisons run all the way through, and so we submit that the Northern Pacific Company was entitled to a scale of rates at least as high as those contained in Tariff 29, a scale which is only fair to the carrier after resolving every possible doubt against it, so that, if there be a doubt as to our cost figures, in our claim for interest on the value of the property, and in any of the contentions which we have made, such doubt is resolved to the disadvantage of the company, that is to say, that any error in the figures and in the computations and claims of the company are errors against its own interest and in favor of the respondents. See *Rowland v. Boyle*, 244 U. S. 106.

B—*Right of Great Northern and O.-W. R. & N. Companies to Tariff 29 Rates.*

Mention has been made of the testimony of the Commission's expert, Mr. Calderhead, that the

Northern Pacific can earn a reasonable return on a lower scale of rates than the other roads (Trans. 753, 754). This was corroborated by Mr. Gray, the expert of the Associated Loggers, whose exhibits showed that the freight operating expense per unit of traffic is lower on the Northern Pacific in Washington than on any of the other roads (Associated Loggers Revised Exhibit 4, Trans. p. 88). There was no testimony to the contrary, and in fact, the hearing proceeded upon that basis. Manifestly, therefore, the evidence just outlined justifying the right of the Northern Pacific to charge the advanced rates of Tariff 29 applies with double force to the Great Northern and O.-W. R. & N. Companies. In addition, however, it is interesting to note the effect of applying Tariff 29 rates to the typical operation used by the Great Northern in its cost studies.

It has been shown above (p. 45) that on its most economical log operation in the state the Great Northern would have to earn the following charges to obtain fair compensation for the service rendered:

Road haul, direct expense per car	$ 9.32
Yard handling, direct expense per car	2.36
Maintenance of way expense, per car	4.06
Miscellaneous expense, per car	4.07
Total operating expense (out of pocket)	$19.81
Taxes, per car	1.69
Capital charges, per car	3.73
Total operating expenses, taxes and capital charges	$25.23
If against the above we apply the revenue per car as proposed by the Department of Public Works ($1.75 per 1,000 feet) on the basis of 7,000 feet minimum, the amount would be	12.25
Or a deficit per car of	$12.98
Or if we apply against the above the revenue per car under existing rates ($2.27 per 1,000 feet) on the basis of 7,000 feet minimum, the amount is	$15.89
Or a deficit per car of	$ 9.34
On the basis of the proposed rates of the carriers, as shown by Henry's Tariff No. 29, the rate for a haul of this length is $3 per 1,000 feet, which, on the basis of a minimum load of 7,000 feet per car, would yield	$21.00
Which would still leave a deficiency of per car below that required by operating expenses, taxes and six per cent return on investment.	$ 4.23

FOURTH.

Comparison of Log Rates With Other Rates.

The reason for the large operating deficit incurred in the log traffic is due both to the additional cost of that traffic, and to the extremely low level of the log rates. The omission of the Department to cite the usual rate comparisons is a significant circumstance. The explanation is that even the existing scale is not supported by any precedent. Because of the origin of the log rates and the morally binding obligation of the early contracts they were originally fixed and have been maintained on a hopelessly inadequate basis. As said in *N. P. R. v. North Dakota, supra*, "Whatever inference may be deduced from ..... rates in other states ..... is decidedly against the reasonableness of the rate."

L. R. Capron submitted N. P. Ex. 9, Tr. p. 99. The rates on logs are reduced from cents per 1,000 feet to cents per 100 lbs. The weight factor was obtained from weighing a number of cars and is not claimed to be incorrect. (Tr. 490.) The log rates are compared with rates in the same territory, as follows:

Revenue in Mills per Ton Mile

Distance	Logs	Brick	Cement	Limestone
5 miles	76 mills	200 mills	260 mills	160 mills
10 "	38 "	130 "	150 "	100 "
15 "	31 "	86 "	100 "	67 "
20 "	25 "	70 "	85 "	55 "
25 "	21 "	56 "	68 "	44 "
30 "	18 "	50 "	57 "	43 "
35 "	16 "	43 "	51 "	37 "
50 "	12 "	36 "	36 "	30 "
75 "	10 "	27 "	24 "	24 "
100 "	9 "	25 "	18 "	23 "
150 "	6 "	20 "	20 "	19 "

Distance	Grain	Lumber	Sand-Gravel	Coal	Junk
5 miles	160 mills	120 mills	120 mills	200 mills	300 mills
10 "	100 "	100 "	60 "	100 "	150 "
15 "	73 "	67 "	40 "	66 "	100 "
20 "	65 "	50 "	30 "	50 "	75 "
25 "	56 "	44 "	32 "	45 "	63 "
30 "	47 "	43 "	27 "	38 "	57 "
35 "	46 "	43 "	26 "	36 "	40 "
50 "	38 "	28 "	22 "	40 "	62 "
75 "	32 "	24 "	19 "	30 "	40 "
100 "	29 "	23 "	15 "	23 "	31 "
150 "	23 "	17 "	13 "	17 "	20 "

In showing rates on logs we have used the distance scale, but the actual rate under which logs move is the special commodity rate which is substantially lower. (See Capron, Tr. 510.)

The O-W. R. & N. introduced a similar exhibit. (Mount, O-W Ex. 6; Tr. p. 313.) This exhibit compares the car earnings on logs with per car

earnings of sand, brick, scrap iron, cement, for similar distances, and is in part as follows:

	Car Earnings	Distance
Logs	$15.20	9.4 miles
Sand	24.00	9.4 miles
Brick	52.00	9.4 miles
Scrap Iron	52.00	9.4 miles
Cement	64.00	9.4 miles
Logs	17.60	28.5 miles
Sand	32.00	28.5 miles
Brick	52.00	28.5 miles
Scrap Iron	64.00	28.5 miles
Cement	72.00	28.5 miles

Witness Mount states that the Interstate Commerce Commission in *Roanoke R. & Lbr. Co v. Norfolk So. Ry.*, 41 I. C. C. 431, used as a basis for comparison with log rates the same commodities with which his comparisons are made. (Tr. 463; See Capron Tr. 493.)

In a recent decision of the Interstate Commerce Commission, in which the Department of Public Works participated, rates on slab wood, a waste product of logs, were established yielding 40% greater revenue than existing log rates. (Tr. p. 461.)

L. R. Capron compared the log rates with the lignite rates held confiscatory in the North Dakota case, as follows: Rates stated in cents per ton. (Tr. 509.)

Distance	Log Rate	Lignite Rate
5	24.0c per ton	30
10	17.6c per ton	30
15	23.5c per ton	35
20	27.6c per ton	37
25	24.8c per ton	38
35	33.0c per ton	41

Mr. Mount cites a number of I. C. C. cases in which much higher rates on logs were approved than are proposed by the carriers in Tariff No. 29, viz:

In 30 I. C. C., page 36, a rate of $2.70 per 1,000 feet for a distance of 10 miles or less.

In 41, I. C. C., 431, $2.40 for 14 miles.

In the Chattanooga log case, 35 I. C. C., 163, rates on logs equal to rates on brick, sand and gravel, fertilizer, grain, cement and scrap iron were approved. The comparisons made by the Commission are as follows:

Commodity	Rev. per Car Mile
Common brick	25.11c
Sand and gravel	31.29
Fertilizer	23.25
Grain	27.90
Cement	20.46
Scrap Iron	23.25
Logs	22.93

(Tr. p. 463-64.)

The Chattanooga case is approved in *Farris Lumber Co. v. Director General*, 68 I. C. C. 181, where the following schedule of rates was applied as compared with Tariff No. 29:

DISTANCES	Rate per 1000 ft.	Proposed Rates S. J. Henry's Tariff No. 29
5 miles and less	$2.08	$2.00
10 miles and over 5 miles	2.50	2.25
15 miles and over 10 miles	2.50	2.50
20 miles and over 15 miles	3.33	2.70
25 miles and over 20 miles	3.75	2.80
30 miles and over 25 miles	4.16	2.90
35 miles and over 30 miles	4.58	3.00
40 miles and over 35 miles	4.58	3.10
45 miles and over 40 miles	4.58	3.20
50 miles and over 45 miles	4.58	3.30
55 miles and over 50 miles	5.41	3.40
60 miles and over 55 miles	5.41	3.50
65 miles and over 60 miles	5.83	3.60
70 miles and over 65 miles	5.83	3.70
75 miles and over 70 miles	6.24	
80 miles and over 75 miles	6.24	
85 miles and over 80 miles	6.66	
90 miles and over 85 miles	6.66	
95 miles and over 90 miles	7.49	
100 miles and over 95 miles	7.49	
105 miles and over 100 miles	7.49	
110 miles and over 105 miles	7.49	

A later case is *Thompson v. Director General*, 88 I. C. R. 395.

The Interstate Commerce Commission has observed in *Ozark v. St. L. R. Co.*, 16 I. C. C. 106-114, that the per car earnings are probably the most satisfactory test of the reasonableness of rates.

It is important to note that while our log rates are far below those on commodities with which they have been compared by the Interstate Commerce Commission, the general level of rates in Eastern territory is substantially lower than in Washington; that is, all other rates are lower than corresponding rates in Washington. (Mount, Tr. p. 463.)

The Commission has held that the carriers in Western territory are entitled to a higher level of rates than in Eastern on account of a less density of traffic. See *Sunflower Glass Co. v. M. P. Ry.*, 22 I. C. C. 391, where the Commission says:

"It is well understood that the general level of rates in central freight association territory, east of the Mississippi River, is very much less than that prevailing west of that river."

This case is approved in *R. R. Com. v. A. T. & S. F. Ry.*, 22 I. C. C. 407-415.

In *German Kali Works v. A. T. & S. F. Ry.*, 28 I. C. C. 223, 224, the Commission observes that the

right of the carriers to maintain higher rates west of the Mississippi than east had theretofore been decided.

The courts have often observed that it is impractical to prove with mathematical certainty the cost of transporting a particular commodity.

In the *Western Cement* case, 48 I. C. C. 201, 234, the Commission comment on this difficulty and say that, as a general rule, "the reasonableness of rates is still determined according to the usual well known methods, important among which are rate comparisons, distance and considerations of traffic density and population."

Judged by any test that can be applied, it appears that the log rates prescribed by the Department are utterly insufficient to pay operating costs and that the carriers cannot be required to accept a lower scale than that which has been submitted in Tariff No. 29.

We submit, therefore, that the Department's order canceling the tariff of advanced rates and the judgment below affirming the order, deprive plaintiffs in error of a fair return on the valuation of their property.

FIFTH.

The Department's distance scale of rates was prescribed with intent to eliminate ex parte 74 advance as applied to the transportation of logs.

The superior court's finding in the order fixing the supersedeas bonds (Trans. 49) shows that the annual losses from the reduced scale of rates are for the Northern Pacific $200,000, for the Great Northern $120,000, for the C. M. & St. P. $271,000 and for the O.W. R. & N. Co. $40,000. As the finding was made by the court after a hearing as required by Sec. 10429, and no exception has been taken, it must be accepted as conclusive. The percentage of reduction is for G. N. 37%, C. M. & St. P. 26%, O.-W. R. & N. 20% and N. P. 15%. The average is about 20%, exclusive of the losses from the minimum loads and patent bunk features.

As shown by the Department's Finding III, Ex. p. 74, was made effective intrastate by its order in its case No. 5092. The effective date was August 26, 1920. On December 30, 1920, this proceeding was commenced by the Department of its own motion. H. O. Berger, traffic assistant for the Department, submitted its Exhibit C, Folio 194, showing

various schedules of suggested rates. The fifth column is headed "H. O. B. Proposed Rates," meaning H. O. Berger's proposed rates. A comparison of Berger's proposed rates with the schedule prescribed by the order is as follows:

Distance	D.P.W.Rate	Berger's Rate
0 to 5 miles	$1.15	$1.10
5 to 10 miles	1.25	1.20
10 to 15 miles	1.35	1.30
15 to 20 miles	1.45	1.40
20 to 25 miles	1.55	1.45
25 to 30 miles	1.65	1.50
30 to 35 miles	1.75	1.60
35 to 40 miles	1.85	1.70

Referring to Berger's testimony, he states that he was not proposing a compensatory rate. He was intending to show a rate scale that would eliminate ex parte 74 advance, as appears from the following:

"Supervisor Cleland: Your purpose was to reduce the present log rates to the rates in effect prior to ex parte 74, or thereabouts?

A. Yes, that is what the proposed rates would practically do." (Tr. 914.)

Cross examination of Mr. Berger was interrupted by Supervisor Cleland, stating:

"I think Mr. Berger is not contending that these are rates that should be established, but is merely offering this in an effort to straighten the matter out." (Tr. 921.)

The cross examination was thereupon discontinued. But for distances up to 20 miles the prescribed scale is but 5c per 1,000 feet higher than Berger's scale, which includes the average distance logs are moved on the Milwaukee and O-W. R. & N. For 25 to 30 miles the difference is 15c. This rate will apply to the average log haul on the Northern Pacific and Great Northern. The slight excess of the prescribed rate over the Berger scale is absorbed by the Department's new rule for computing minimum loads (Finding 24) and the lower rate and minimum prescribed for cars not equipped with patent bunks. (Finding XXIII.) In Finding XXV the following occurs:

"The promulgation of the rules designating an average carload minimum based upon the number of cars tendered the carrier in any one shipment will reduce the revenue of the carriers by an amount equal to the excess charges amounting to about six per cent of the total charges or approximately $150,000 per year under the scale of prices herein prescribed."

Mr. Berger himself admitted that the proposed scale was not intended to be a reasonable or compensatory scale of rates. He could cite no precedent or authority for rates so low. Neither was any other witness produced to justify the Berger

scale. Mr. Freeman, another Department expert, submitted a 21% higher scale. (Tr. 916-17.) Since it was avowedly designed to eliminate ex parte 74 advance as applied to logs, and entirely without evidence to support it, its adoption by the Department must be presumed to have been intended to carry out the purpose for which it was submitted. The Department's order, therefore, is stripped of the pretense of fair and impartial decision and stands forth undisguised as an attempt to annul the order of the Interstate Commerce Commission made in the exercise of its jurisdiction over interstate commerce and interstate common carriers.

Conceding that the state has a measure of control over individual intrastate rates, notwithstanding the order in ex parte 74, we submit that such power as it has does not extend to an arbitrary elimination of ex parte 74 advance as applied to a certain class of traffic. If it has such power over the log traffic it has the same power over grain, hay, fruit and coal, and this leads directly to the conclusion that it may set aside the advance as applied to the entire body of the intrastate traffic. And further, if the state may do this within a year it may do so within six months, within three months or the very next day. It was held by this

court in the *Wisconsin* case, 257 U. S. 563, that the order of the Interstate Commerce Commission in ex parte 74 was promulgated in the exercise of its jurisdiction, and was binding on the states as applied to intrastate commerce; it is held in *New York v. United States*, 257 U. S. 591, that the order is not subject to collateral attack (unless, indeed, not sustained on the face of the findings); and from these principles it seems true to say as a corollary that the Department could no more set aside Ex Parte 74 as it applies to log traffic than it could have refused to make it effective in the first place; and its attempt to do so in this case is unlawful for the same reason and to the same extent as if it had refused to be governed thereby in the first instance, and the Wisconsin case applies with full force.

SIXTH.

The Department's findings and the decision of the court below to the effect that existing rates were discriminatory is, (a) not supported by the evidence; and (b) in any event, is immaterial.

Finding V., Tr. 22, is as follows:

"It appears from the evidence in this case that the tariffs and schedules containing the rates

shown in Department's Exhibit A are and were lacking in uniformity, and were and are grossly discriminatory, unduly preferential and therefore unlawful."

The decision, per Pemberton, J., in passing, comments that the Department "has attempted to establish reasonable rates to supersede the discriminatory and unreasonable rates" .... (Tr. 57.)

The Department's Ex. A, Tr. 72, is a mere compilation of the existing rates. It is true that the published rates vary for equal distances and in some instances a greater rate is charged for a shorter distance than for a longer haul, but not over the same route in violation of the long and short haul clause. Only in this sense, and on paper, are the rates discriminatory. There was no claim that, *in practice*, any *unjust* discrimination has ever occurred. In the first place, many of the apparently unequal rates are mere paper rates under which no traffic is moving. The witness Mount testified without contradiction (Tr. 461) as follows:

"Q. Then considering O-W. R. & N. Company's Ex. No. 6 in connection with Mr. Calderhead's Ex. A., that would show that the greater proportion of rates in Calderhead's Ex. A are merely paper rates?

A. Yes, as I explained previously, they were rates that had been in effect for a number of years but should have been removed for some time" . . . .

Mr. Calderhead, the traffic expert for the Department, in submitting this exhibit, Tr. 319, testified:

"The first graph shows the Northern Pacific, and that includes both East of the mountains and West of the mountains, and is made for the purpose of showing the discrepancies and differences between rates for similar distances upon the same line of road and upon different lines of road. The last chart indicates the combined four railroads. Taking the sheet E it will be noticed that on the combined railroads there are rates in single car lots for distances between 6 to 10 miles of less than $1.00 while for distances between 1 to 5 miles there are rates of $2. This same discrepancy applies all the way through."

This is all of defendants' testimony to sustain the finding of discrimination. Not only is there no finding of *unjust* discrimination, but there is not the slightest bit of testimony that such discrimination exists. A mere difference of rates, of course, is no evidence of discrimination, in the absence of a showing of similarity of transportation conditions. On the Great Northern, for instance, it will be observed that the Eastern Washington rates are

somewhat higher than those in Western Washington, but that the rates on each side of the state are generally uniform between themselves. (Trans. fol. 193-5, 193-6.) Such differences as exist are due to differences between main and branch line movements, operating difficulties, etc. The Great Northern is the only carrier which has any log business in Eastern Washington and that business is confined to a branch extending north of Spokane into British Columbia, on which operating costs are considerably higher than on the Western Washington divisions where most of the logs move. (Trans. p. 903.) Rates there are obviously not comparable with those elsewhere. In short, nothing more appears to support the charge of unjust discrimination than was shown in *Public Service Com. v. State ex rel. Great Nor. Ry. Co.*, 118 Wash. 629, 204 Pac. 791, 207 Pac. 688, and there the evidence was held insufficient in a case involving rates on logs. See *U. S. v. I. C .R. Co.*, October Term, 1923. The $1.00 rate for 6 to 10 miles, particularly mentioned by Mr. Calderhead, was established many years ago in compromise of a grade crossing demand (Mount, Tr. 455, 56) and is not even claimed to have been actually used for many years. That the carriers' rates are not in

practice discriminatory in an unjust sense is proven by the fact that *no log shipper on any line appeared to testify to that effect in this case.* This circumstance is entitled to very great weight.

But the question of discrimination, *vel non*, is wholly immaterial, for the Department's order is not one removing discrimination. Discrimination may be removed as well by raising as lowering the unequal rate. *St. L. & S. W. R. Co. v. U. S.*, 245 U. S. 136. It is an order fixing new rates, as said in the case cited:

"Orders to remove discrimination, as commonly framed, do not fix rates. They merely determine the relation of rates, by prohibiting the carrier from charging more for carriage to one locality than under similar conditions, to another; and they usually leave the carriers free to remove the discrimination either by raising the lower rate or by lowering the higher rate, or by doing both. Am. Ex. Co. v. So. Dak, 244 U. S. 617. The order here complained of gives the carriers no such option. * * *"

The finding here made of discrimination is plainly a pretext rather than a reason for an order making ruinous reductions in the already utterly inadequate schedule of log rates—rates so low as to be without precedent on the continent of North America.

SEVENTH.

The Department's order, if otherwise void, is not saved because for an experimental period of twelve months.

Finding XX is as follows:

"The impossibility of accurately determining the cost of transporting any given commodity by a rail carrier is conceded by many traffic and statistical experts. A comparison of the widely different conclusions reached by experts of acknowledged ability and integrity who have presented exhibits in this case, demonstrates the difficulties of such a task. We realize the calculations we have made and the conclusions we have reached differ from those of the experts on both sides of this controversy. We and our own experts, however, have had the benefit of all the exhibits and testimony in the case and have sought to avoid errors pointed out during the progress of the hearing. While the difficulty of ascertaining with certainty the cost of transporting any given commodity in a past operation is great, the difficulty of forecasting the cost is infinitely greater. Predictions can only be based upon past experience and future probabilities in the light of all the facts. The volume of traffic moving is a controlling element. The fixed charges of a railroad remain fairly constant and the operating expenses do not increase proportionately with increased traffic volume. If the rates we prescribe

stimulate the log movement or the volume of traffic increases for any other reason, these rates will increase the earnings of the carriers on this commodity.

"It is because of the impossibility of forecasting results with certainty that we have decided to prescribe a twelve months period of experimental operation under the new tariff.

"The rates we have fixed will constitute a material reduction to the shippers, and in view of less expensive operation, and the reasonable assumption of increased volume of traffic, we believe they will yield a net revenue equal to that afforded by the existing rates, and in any event equal to the rate of return fixed by the Interstate Commerce Commission as fair and just on the traffic as a whole."

The order provides that the distance scale of rates prescribed shall "*remain in effect during an experimental period of twelve months from the effective date thereof, or until the further order of this department.*"

The dissenting opinion of Judge Fullerton states that this feature seems to have been given weight by the prevailing opinion, where it is said:

"We find that the rule laid down in the case of Northern Pacific Ry. Co. v. North Dakota, 216 U. S. 579, is properly applicable to this case wherein it was said:

" 'The great difficulty in the attempt to measure the reasonableness of charges by reference to the cost of transporting the particular class of freight concerned is well known and often has been remarked. It seems to us that the nearest approach to justice that can be made at this time is to follow the precedent of Willcox v. Consolidated Gas Co., 212 U. S. 19, as nearly as may be, and affirm the decree, but without prejudice to the right of the railroad company to reopen the case by appropriate proceedings, if, after adequate trial, it thinks it can prove more clearly than at present the confiscatory character of the rates.' "

The concurring opinion of Justice Holcomb is rested on this ground.

This principle cannot apply here for several reasons, viz.: (a) The case cited, and similar cases, were suits by injunction to restrain the enforcement or compel the observance of a legislative schedule. The burden was on the carrier to overthrow the presumption of verity attending legislative action by affirmative evidence. But, under our statute, as construed in *State ex rel. O. R. & N. Co. v. Fairchild*, 224 U. S. 510, the *burden was on the department*, and the presumption of correct decision in the reviewing court is overthrown by pointing out that there is not sufficient evidence in the *record under review* to support the order. (b) In the North Dakota

case the scale was prescribed by the legislature, and it did not appear on *the face of the act* that the rates were fixed on a fundamentally erroneous basis, as appears here on the face of the Department's findings. (c) The Washington statute provides that rates shall be "just, fair, reasonable and *sufficient.*" Rem. Code, Sec. 10345. Section 10389 provides that when the commission shall find that rates were unjust, unreasonable, etc., or "insufficient to yield reasonable compensation," it shall determine the "just, reasonable or sufficient rates" to be thereafter observed. These statutes limit the Department's power, so that a rate order is valid only where it finds the facts made a condition precedent to the exercise of its authority. There is no power of experiment conferred upon the department. It is certainly true to say that if there be no findings that rates are unjust, unreasonable, or otherwise in violation of the act, the order would be void. This point is established by the decision in *Wichita R. & L. Co. v. Public Utilities Commission*, 260 U. S. 48.

(d) The principle of *N. P. v. North Dakota* is also inapplicable because the rates there ordered *had not yet been tried by the carriers.* They were ordered to try out a *new* rate schedule. But here it

is shown that the existing schedule is inadequate. The experiment has already been made with a higher schedule than the one now prescribed. If an existing higher schedule is shown to be inadequate it seems absurd to say that a schedule 20 per cent lower might prove adequate. Justice Fullerton, in his dissent, took this view, and added that the department is as well prepared now to make the investigation as it will be after the experiment. See *Rowland v. Boyle*, 244 U. S. 106. (e) The cases in which it is held that a trial of the rates should be had were close cases, in any event, the margin between a legal and unduly low rate being so narrow that the court could not decide with assurance on the facts then available. But here the carriers have resolved the doubtful factors against themselves, and still show, even under the present schedule, an actual out-of-pocket operating loss of hundreds of thousands of dollars in the year 1920 and corresponding loss for the first six months of 1921 which brought the figures as near to date as was possible. This was exclusive of any return on property value. No trial of a reduced scale was needful, therefore, to prove confiscation. (f) In the North Dakota case the court did not disregard facts proven without dis-

pute. After giving effect to what was shown by the evidence the issue was thought to be left in doubt. But here, undisputed evidence must be utterly disregarded, and the Department relieved of the burden of proof resting upon it in order to permit of an experiment at the expense of the carriers. During the test period the carriers may be ruined, as indeed they would be if such an experiment be extended to even a few additional rates.

(g) In Finding XX the experiment is defended on the theory that the volume of traffic may increase and that operating expenses may decrease. But, as said in *Smyth v. Ames*, 171 U. S. 361, "*of course, the reasonableness of a schedule of rates must be determined by the facts as they exist when it is sought to put such rates into operation.*" And in *Southwestern Bell Tel. Co. v. P. S. Com.*, 262 U. S. 276, it is held that the value of the property is to be determined as of the time when the inquiry is made regarding the rates, and "an honest and intelligent forecast of future values made upon a view of all the relevant circumstances, is essential. If the highly important element of present costs is wholly disregarded, such a forecast becomes impossible. Estimates for tomorrow cannot ignore prices of today." See also *Paducah v. Paducah Ry. Co.*,

261 U. S. 267. But the department disregarded present costs of operation and traffic conditions and speculated upon the future at the expense of the carriers. If, in the future, conditions should change it will then be time enough to reduce rates. In the North Dakota case the decision was based upon *present conditions* shown by the evidence, and not upon a speculation that prices may fall and traffic increase so that an otherwise admittedly confiscatory scale of reduced rates should yield as much revenue as an existing higher scale. Here, admittedly, the reduction would make the scale confiscatory under the department's own findings unless its speculations as to the future are realized. This is a gamble in futures which plaintiffs in error could not be required to make. In *Brooks-Scanlon Co. v. R. R. Commission*, 251 U. S. 396, it was argued that under a new schedule the road might be operated at a profit but the court say "that is merely the language of hope. We cannot take it to be a finding of fact, for we perceive nothing in the evidence that would warrant such a finding." In *United States v. N. Y. C. R. Co.*, October Term, 1923, involving an order of the I. C. Commission requiring the sale of mileage books at reduced rates, the point here involved seems to have been directly decided, as appears from the following:

"The Commission in its report pointed out that the net railway operating income for the seven months ending July 31, 1922, was below the return fixed as reasonable, discarded the supposed analogy between the carload rate and the interchangeable scrip or mileage ticket, intimated that the supposed benefit that the carrier might get from the advance use of the money would be more than offset by the increased expenses, and said that the question whether the scrip ticket would stimulate travel sufficiently to meet any loss that might result must remain a matter of speculation until an experiment was made. After thus excluding the grounds upon which the order could be justified the commission held that the obvious spirit and apparent purpose of the law required that the experiment should be tried, and on these premises declared that the rates resulting from the reduction of 20 per cent, would be 'just and reasonable for this class of travel.' "

The situation in the case at bar is quite similar, if not identical. The department finds that, under the existing scale, revenues from log traffic are about 6 per cent of the property value. But, because of a hope or speculation that log traffic may increase and expenses decrease, it is assumed that the reduced scale will yield as much revenue as an existing 20 per cent higher scale. It is on these premises that the department finds that the rates resulting from the reduction of 20 per cent would

be just and reasonable. If we understand the case cited it condemns an experimental schedule of rates made on such premises.

(h) The state court has never before announced such a doctrine. It has consistently held that an erroneous order will be reversed. The log rate order involved in *Public Service Com. v. State ex rel. Great Nor. Ry. Co.*, 118 Wash. 629, 204 Pac. 791, 207 Pac. 688, was reversed because of errors in fixing the rate very similar, though not nearly so glaring, as those involved here, and although confiscation was not even claimed by the company. There was no need for an experimental period for the state statute empowers the department to reconsider an order of this kind at any time. Rem. Code, Sec. 10432. The state court is also committed to the doctrine that the department's orders must be supported by facts proven *on the record.* See *State v. R. R. Commission*, 60 Wash. 218, 232, 110 Pac. 1075, a case announcing the same rule as that declared by this court in *State ex rel. O. R. & N. Co. v. Fairchild*, 224 U. S. 510. In the case at bar, these well settled principles are disregarded, and an order based upon a wrong theory apparent upon its face and not sustained by any evidence and contrary to undisputed evidence is upheld by the court and defended on the

theory that it is only for an experimental period of twelve months, "or until the further order of the department." Such a doctrine as this is not sanctioned by this court in the North Dakota case or any other authority.

The point seems so unsound that this discussion is hardly needed. Our excuse is that it so largely influenced the decision below where it was much relied on by defendants.

We submit, therefore, that the order and judgment below are not to be upheld because the rate is for an experimental period, if otherwise it should be reversed for the errors pointed out.

We submit that the order of the Department and judgment of the state court should be reversed.

Respectfully submitted,

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IN THE

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1924.

No. 371.

NORTHERN PACIFIC RAILWAY COMPANY, et al.,
Plaintiffs in Error,

vs.

THE DEPARTMENT OF PUBLIC WORKS OF WASHINGTON, et al.

BRIEF FOR PLAINTIFFS IN ERROR ON MOTION TO DISMISS THE WRIT OF ERROR.

(1) The first ground assigned for dismissal is that the judgment of the Supreme Court of the State of Washington (if reviewable by this court at all) must be brought here by certiorari instead of writ of error.

This question was settled by *Bluefield W. W. & Imp. Co. v. P. S. Commission*, 262 U. S. 679, and *Missouri ex rel. S. W. Bell Tel. Co. v. P. S. Com-*

mission, 262 U. S. 276. Those cases were exactly like this; viz., there was an order of a state commission fixing what it found to be reasonable and just rates; the legislature in all the cases having enacted that rates must be reasonable and undiscriminatory and then told the commission to fix the exact rates applying these general rules. The Bluefield case holds that the order of the commission under such authority is a legislative act—that is a law; consequently that an attack on the validity of the order (as on the ground of its confiscatory character), is an attack on the validity of a law; and that where the highest court of a state overrules such contention writ of error is the proper review.

Under Sec. 10389 Remington's Compiled Statutes of Washington, 1922, the state commission is given legislative authority, either upon its own motion or upon complaint, to determine the charges that may be demanded and collected by every common carrier for transportation within the state, and to determine the regulations and practices of such carrier. In Sec. 10345, the legislature said that all such charges should be just, fair, reasonable and sufficient. In other sections it prohibited discrimination. But instead of trying to fix directly the charges of such carriers it delegated to the commission its authority in that respect.

Sec. 10428 Remington provides for review of the commission's orders in the Superior Court, and Sec. 10430 provides an appeal thence to the Supreme Court. This case is like the two cases we

have cited; as in those cases the judgment complained of here is that of the state court in a direct proceeding to review the commission's order.

(2) The second and third grounds of the motion to dismiss may be treated together. The second is that no federal question is involved; and the third, that if one appears to be involved it is only colorable and not real and substantial.

We shall try to show, in as brief a manner as possible and without argument, what the issues in the case are.

December 30, 1920, the Public Service Commission (now called Department of Public Works) filed a complaint of its own motion against the plaintiffs in error, the Northern Pacific Railway Company, the Great Northern Railway Company, the Chicago, Milwaukee & St. Paul Railway Company, the Oregon-Washington Railroad & Navigation Company, and others, the railway companies being the four principal companies doing business in Washington. This complaint alleged that the log rates in Washington were "excessive, unreasonable, discriminatory and preferential." The hearing resulted in findings of fact and an order fixing for twelve months the carriers' rates for transporting logs. This finding and order is printed as Appendix 1 to the "Motion to Dismiss."

The order made a reduction of about twenty-five per cent in the existing log rates applicable to an enormous business,—about 250,000 carloads per annum.

In Washington logs are commonly hauled by rail from the forests to the sawmills for manufacture. The forests are reached largely by logging railroad branches, on which there is no, or little, other traffic. The logs are hauled on special cars different from other cars and always, or mostly, in trains unmixed with other freight. Generally the log trains move partly over a logging branch and partly over some main line of the carrier, over which also move large volumes of other traffic, passenger and freight.

It thus appears that the log business is in a class by itself and that in every essential respect it is very dissimilar to other traffic.

The Public Service Commission proceeded on the theory that the carriers were entitled to earn from the transportation of logs a just return on the value of their property assignable to that transportation.

There was a long hearing and much testimony on the value of this property and on the cost of transporting logs. In finding XV the commission assumed that $300,000,000 would cover the value of all the property of the four carriers in any way used or useful in connection with log traffic; it considered that not more than 75 per cent of such value or $225,000,000 is assignable to freight; it said that gross ton miles of logs hauled by the four carriers within the state were about 4.97 per cent of the total gross ton miles of all revenue freight; and from that fact made the deduction that 5 per cent of the value of the carriers'

property assigned to freight service was to be attributed to carriage of logs.

The commission's method of figuring operating costs is shown in finding XIII. The aggregate expense for the four lines for log transportation the commission found to be $1,923,198. To get this figure it took the "cost per 1,000 gross ton miles of handling all freight upon the combined systems of the four principal carriers." That is, the commission took as the cost of log transportation in Washington the average cost as reported by the carriers of transporting freight of all descriptions on their systems, lying in many states and subject to widely varying conditions. The assumption, that the cost of hauling sawlogs in Washington is the same as the average system cost of transporting all freight on the four railroads, is a violent assumption, which there is no evidence to sustain. The theory is an invention of the commission.

The commission disallowed the carriers federal income taxes. It is difficult to conceive why federal taxes were excluded from operating cost.

The carriers attempted to prove in several ways the value of their property properly assignable to log transportation as carried on in Washington and the costs properly chargeable to that transportation, showing such cost separately for main and branch lines [Transcript Exhibit 17, Witness Peterson]. On the carriers' showing the commission's tariff was clearly confiscatory, yielding no net revenue whatsoever.

The carriers in their assignments of error here as well as in the state court said that the tariff fixed by the commission was confiscatory, and seasonably and in proper manner they have specified objections to the valuation of property fixed by the commission as well as to the commission's determination of expense chargeable to the log traffic. Every contention that a commission's order, or an act of the legislature fixing a tariff, operates to confiscate property, raises questions which must ultimately be determined as facts. First, what is the fair value of the property on which a return is to be allowed, and secondly what is the cost of doing the business. In this case these questions were fully and extensively litigated before the commission and in various essential respects the commission's rulings are properly charged to be erroneous.

The motion does not suggest that assignments of error are insufficient or that the questions involved were not pressed on the state court. It is proper, however, to say that among other errors insisted on in the state court and reassigned here are the following:

1. The Department adopted a wrong theory for determining cost of the log traffic.

2. The Department also determined on a wrong basis the value of the carriers' property devoted to log traffic.

3. The Department apportioned taxes to log traffic on a wrong basis.

4. The Department's schedule of log rates is confiscatory and takes appellants' prop-

erty without due process of law, contrary to the Fourteenth Amendment.

Tariff No. 29, submitted by the carriers, is a just and reasonable schedule of rates. Its cancellation takes appellants' property without due process of law, in violation of the Fourteenth Amendment.

The Department's finding that existing rates are discriminatory (if material) is contrary to the evidence.

The Department's order discriminates against interstate commerce.

The rates named in tariff 29 are not in excess of the rates the carriers are entitled to.

It is therefore too obvious for discussion that federal questions are involved in the record and that to say the least they are not far-fetched or frivolous. The motion to dismiss must therefore be denied.

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for Plaintiffs in Error.

Supreme Court, U. S.
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SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1924.

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ON SUBSTITUTION OF PARTIES

It seems that consent cannot give jurisdiction of a successor officer in suits for injunction and mandamus. *Bernardin v. Butterworth*, 169 U. S. 600, 605; *Pullman Co. v. Croom*, 231 U. S. 571, 575, 576; *Pullman Co. v. Knott*, 243 U. S. 447, 450; *Irwin v. Wright*, 258 U. S. 219, 222; *Gorham v. Wendell*, 261 U. S. 1.

Sec. 193 Remington's Statutes not applicable on the authority of *Irwin v. Wright*, p. 222-3, where the code of Arizona was like Sec. 193.

Irwin v. Wright, p. 224, holds however that the rule requiring abatement does not apply where the state officers constitute a board having continuing existence. Therefore newly elected members of the

Board were substituted in the Supreme Court, p. 224-5.

Same held in *Gorham Co. v. Wendell*, p. 4.

This last case, p. 5, holds that where the officers of the state consent to substitution the federal court need not be astute to enforce abatement if any basis at all can be found in the state law or *practice of its courts* for the substitution.

The findings and order of the Department of Public Works (Trans. p. 19) show that the complaint in this proceeding was brought by "the Public Service Commission of Washington, now the Department of Public Works of Washington."

The proceedings were commenced by the Public Service Commission. This was a body of state officials which the statute said should be known collectively as "The Public Service Commission of Washington" (Sec. 10342 Remington's Statutes).

Pending the proceeding, ch. 7, laws 1921, was passed. This act substituted for the Public Service Commission (as well as for many other state bodies) a *department of the state government.* Sec. 2 of the act creates several such departments, No. 1 being "The Department of Public Works."

By Sec. 21 of this act the Department of Public Works consists of three divisions to be known as (1) the division of transportation, (2) the division of public utilities, and (3) the division of highways. The director of public works provided for in the act, this sec. says, "shall have charge and general supervision of the department of public works."

By Sec. 22 the director is to appoint an assistant to be known as "supervisor of transportation."

By Sec. 23 he is to appoint an assistant to be known as "supervisor of public utilities."

By Sec. 25 the director is authorized by means of the division of transportation to exercise all the powers and duties relating to common carriers of freight and passengers and the transportation of property or persons theretofore vested in and required to be performed by the Public Service Commission.

By Sec. 26 the director is authorized by means of the division of public utilities to exercise all the powers and perform all the duties theretofore vested in and required to be performed by the Public Service Commission (with certain exceptions).

By Sec. 27 the director of public works, the supervisor of transportation, and the supervisor of public utilities are given authority jointly to hear and decide by majority vote all matters arising either in the division of transportation or the division of public utilities.

This board of three were thus invested, acting by a majority, with the power to fix carriers' rates theretofore exercised by the Public Service Commission, and in point of fact heard and decided the matter here involved and in that way continued and closed up a proceeding which had been instituted by the Public Service Commission.

It is plain that these three constituted a public body or board which was the successor of the Public Service Commission and which remains a

continuing body in the future regardless of changes of personnel. Substitution of new members of this board in place of the old ones is authorized by *Irwin v. Wright* and *Gorham Co. v. Wendell.*

The foregoing proceeds on the ground that this is a suit in which the authorities before cited apply—that is a suit brought against certain state officers purely in their personal capacity, to which therefore their successors in office have no relation.

We now insist, however, that the suit is not of that character and that the authorities we have cited have no relation to this proceeding.

The decisions cited are cases seeking either a writ of mandamus or of injunction. The foundation of such actions is a breach of personal duty which may involve the defendant in damages and penalties. This is given as the reason why their successors ought not to stand in judgment. Reference to this record will show how different this proceeding is.

This is a proceeding for review authorized by the state statute of the order of a legislative tribunal fixing rates for the plaintiffs. It set up the whole proceeding and the resulting order fixing a tariff, and the prayer did not include or have any occasion to include an injunction. It is confined to praying "that said unlawful findings and order of the Department of Public Works be reversed and set aside, and that the Tariff No. 29, heretofore filed by the petitioners, be put in full force and effect"; and the only writ prayed for is one re-

quiring the department to certify to the court the entire record in the proceedings, including the testimony taken and the exhibits.

The relief prayed is confined to setting aside the order of the department. As no injunctive or mandatory relief is asked there seems no good reason why the board of three provided for in the act of 1921 should not be treated as a body party to the action and aptly designated as "The Department of Public Works." The Department of Public Works is the first defendant named in the record and this name ought fairly to mean the board of three provided in the act of 1921. As no question about this was raised in the state court none should be entertained here. This seems the theory on which the order and finding under review is itself based. This order and finding is signed "Department of Public Works of Washington, by E. V. Kuykendall, Director; Hance H. Cleland, Supervisor of Public Utilities; Frank R. Spinning, Supervisor of Transportation." And in the first paragraph it is stated that the Public Service Commission of Washington is "now the Department of Public Works of Washington." Its successorship to the Public Service Commission thus expressly stated in the finding and order under review shows the department's own view that it is a suable body; this body consisting in proceedings like this of the director and the two supervisors.

CHARLES W. BUNN.